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THE PROBLEM OF ORIGINS

Other Books By DR. KEYSER

MAN'S FIRST DISOBEDIENCE
CONTENDING FOR THE FAITH
A SYSTEM OF CHRISTIAN EVIDENCE
A SYSTEM OF GENERAL ETHICS
THE RATIONAL TEST

THE PROBLEM OF ORIGINS

Whence Came the Universe?
Whence Came Life and Species?
Whence Came Man?

A FRANK DISCUSSION OF THE DOCTRINES
OF CREATION AND EVOLUTION

BY

LEANDER S. KEYSER, A.M., D.D.

PROFESSOR OF SYSTEMATIC THEOLOGY IN HAMMA DIVINITY SCHOOL, WITTENBERG COLLEGE, SPRINGFIELD, OHIO

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While these periodicals are of a religious character, their editors are scholars who are deeply interested in the scientific and philosophical phases of the questions here discussed, as well as in their theological implications and importance. All these editors believe, with the author, that no conflict exists between true evangelical Christianity and the real, empirical results of scientific investigation.

It is only fair to add that much new matter—matter that has never previously appeared in print—is included in this work.

L. S. K.

Wittenberg College,
Springfield, Ohio.

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THE PROBLEM OF ORIGINS

THE PROBLEM OF ORIGINS

CHAPTER I

PRELIMINARY OBSERVATIONS

This book deals with the vital problems of creation and evolution. It is the outgrowth of earnest conviction. The subjects here discussed have a threefold interest and importance: 1. Scientific; 2. Philosophical; 3. Religious. The author believes that true science makes for human welfare; that a true world-view (philosophy) gives vision, depth and breadth to human life; and that religion affords a true basis for individual and social ethics and a solid and needed assurance of future destiny for man and the universe. All of these elements must be combined and correlated in order to produce the best, fullest and happiest life here on the earth.

The author cherishes a kindly feeling toward those who differ from him. He is conscious of no rancor in his soul. He does not believe in ridicule and epithets. He has tried to avoid the satirical temper in this volume. Here and there a vigorous expression may occur, but he hopes his readers will attribute it to earnestness of conviction, not to a scornful or angry spirit.

He calls no one ignorant. On the other hand, he frankly recognizes the intellectual acumen and academic achievements of many thinkers who hold views directly

opposed to his own. According to his way of thinking, it is ungracious to accuse an opponent of ignorance. It also seems to betray or connote a boastful spirit on the part of the accuser. Besides, human knowledge is only a relative achievement. No man knows everything, nor even a considerable fraction of everything. What men know is comparatively little; what they do not know is a vast deal. And this is especially true when they try to penetrate into the inner nature and constitution of things. When the author was only a lad, this adage was given to him by one of his teachers: "The truly educated man never brags about his attainments, because he knows enough to know that he doesn't know much."

Careful attention is called to the following observations. In this work the terms "creation" and "evolution" are used in their technical, scientific and restricted sense, which, we hold, is the only correct sense in which to employ them. The word "creation" here means the bringing into existence of an entity or a principle or a force that had no prior existence. It is technically known as *creatio ex nihilo*. We hold that the expression, "creative evolution," is a contradiction of terms and of thought. An entity must exist before it can be developed. If it does not exist, it cannot be developed from nonexistence into existence. This thought is dealt with more fully further on. Thus the reader, as he proceeds, should constantly bear in mind the technical sense in which the term "creation" is here employed.

The same caution must be given regarding the term "evolution." It is used here, not in the elastic sense, but in the strictly scientific sense—the sense in which it is employed by the truly scientific exponents of the theory. Some persons, however, even among the scientists, confuse the issue by using the phrase, "creation by evolu-

tion." Even Dr. Henry Fairfield Osborn commits, as we think, this grave error.[1] So does Professor J. Arthur Thompson in a very recent voulme.[2]

But evolution and creation cannot thus be merged and identified. They connote distinct conceptions and processes. Evolution does not mean and cannot mean the creation of an entity or principle *ex nihilo*. It means only the progressive unfolding of something that already exists and that has been endowed by its Creator with certain inherent potentialities that enable it to develop. Surely something cannot be evolved out of nothing. But, given a personal God, all-wise and all-powerful, it is comparatively easy to find intelligibility in the conception of the creation of something that had no previous existence.

The advocates of "creation by evolution" should be required to say just what they mean by "creation." If they mean the development of a so-called new species of organism from a lower form by means of resident forces, they are using the terms "evolution" and "creation" synonymously, and thus would be guilty of the tautological phrase, "evolution by evolution." No; the unfolding of an entity, originally endowed with developing power, as it must have been, is not the same as creation.

The term "evolution" is, however, sometimes used still more loosely, causing not a little confusion. Too many people use it to denote any kind of progress, no matter how it is brought about. But that, too, we hold to be inaccurate. For example, orderly progress may take place by creation as well as by development; for, if God first created the primordial material of the universe, and then later, at definite periods, created the various kinds of organisms, and lastly created man's soul

[1] *The Earth Speaks to Bryan.* [2] *Science and Religion*, p. 177.

in the divine image, that would be progress by successive stages or acts of creation. And it would be *orderly* progress. But it certainly would not be evolution, according to the scientific use of the term.

Another common error is to refer to the growth of a tree from a seed or of a chick from an egg as a case of evolution. But that is not at all what is meant by the theory of evolution, which carries the idea of the transformism of species, the higher from the lower. To avoid logomachies, therefore, it is better in the cases just cited to use the terms "growth" or "development."

We cannot agree with our friend, Dr. Louis Matthews Sweet, who in his recent book devotes a chapter to a discussion of the variant, elastic and confusing ideas that prevail concerning the definition of evolution.[3] If nobody knows what it is, it surely cannot be a good scientific term. A term that has no stabilized meaning, one with a significance that flits about uncertainly like an *ignis fatuus,* cannot be of real use in science. We believe that the term "evolution" has come to have a definite meaning in these days—at all events, by those who employ it intelligently. In his next chapter Dr. Sweet gives some true definitions, two of which we shall take the liberty to quote.[4]

Here is a definition of evolution by Professor Albert G. Keller of Yale University: "The essence of evolution is the development of form out of form, in a connected series, with a survival of the fitter forms in adjustment to environment." Of course, the restrictive phrase, "in adjustment to environment," may be questioned, but the rest of the sentence tells us just what the theory of evolution is.

Next we quote Professor Vines' definition in the

[3] *To Christ through Evolution,* Chap. II. [4] *Ibid.,* pp. 82, 84.

Encyclopedia Britannica: "Evolution means the gradual development of 'highly organized' from 'lowly organized' forms, that is, of forms in which the 'physiological division of labor' is more complete from those in which it is less complete; of forms possessing a variety of organs from forms possessing but few."

Le Conte's definition is well known, but may be repeated here: "A continuous progressive change, according to certain fixed laws and by means of resident forces." In short and in fine, the theory of evolution means what is known as transformism—that is, the transformation of the simpler into the more complex, of lower forms of life into higher by gradual processes and natural forces. And thus it will be used throughout this volume.

In addition, it should be said that evolutionists do not all hold the same general view of the hypothesis. They may be divided into three classes: 1. Those who do not try to explain the origin of life, but hold that, life being given, all the diverse organic forms on the earth, including man, have been evolved from the primordial germ-plasm or cell; 2. Those who go further back, and accept the doctrine of spontaneous generation (often called abiogenesis), or that living matter evolved from non-living matter by means of some mysterious physico-chemical process; 3. Those who go back still further, and contend that the potency, or principle, of unfolding life was inherent in the primordial material, whether created or eternal. The last is known as "cosmical evolution."

However widely the transformists may differ on the foregoing points, all of them agree on one outstanding tenet: namely, that man has been evolved from an animal ancestry; that he came up from the same primate stock as the simians; and, further, that all organisms must trace

their lineage back to the primordial bioplasm or cell or amoeba.

This, then, is the hypothesis with which we shall deal in this work, comparing it constantly with the doctrine of divine creation.

Should the usual challenge that the author is not a technical scientist be made, he would offer the simple and honest explanation that, while he boasts of no superior wisdom, he has been a student of scientific works ever since his youth, and has never lost his interest in scientific investigation and discovery. Indeed, at one time it was his desire to make the study and teaching of physical science his life work. Even before his college days he was reading with avidity the works of Darwin, Spencer, Huxley, Tyndall, Proctor, Agassiz, Dawson, Hugh Miller, Dana and others. A young friend and he, through the reading of certain infidel productions, had grown very skeptical of the Christian religion; yet he remembers vividly that, while they were reading Darwin's *The Origin of Species,* they were wont to exclaim, laughingly, "What a god Darwin makes of natural selection! What consummate wisdom his god has!" Since those days he has studied many works on the side of evolution. He has also read many books that oppose evolution. For this reason he can say—with becoming modesty, he hopes—that he has given both sides prolonged and earnest study.

The author deals in this volume directly with the works of some of the most eminent living champions of evolution, makes his inductions from a first-hand examination of their productions, and brings their findings and inferences before the bar of science and reason. In other words, he pushes the warfare into the very camp and citadel of the evolutionists.

Nor does he in a single case, as far as he is aware,

call in question any of their *facts;* indeed, he gladly acknowledges them all. Neither does he question their intelligence, honesty or motives. He tries, as far as possible, to deal with their principles, claims and arguments. What he does interrogate is only their speculations, deductions and over-broad generalizations.

Therefore, while he makes no claims of great scientific erudition—that would not be modest—he ventures to hope that the scientific exponents of evolution, as well as others, will give his arguments fair and judicial consideration, and will do so purely in the interest of truth and human welfare.

At the beginning of his work, the author desires to register his firm and sincere conviction, after years of study and experience, that the Bible and true science are in amicable accord. In saying this, he means two things: 1. The Bible honestly, simply and clearly interpreted at its face value, not manipulated to mean anything that subjective conceptions may want it to mean. 2. The real results of scientific investigation, not the unverified guesses and speculations of science. These points will be carefully elucidated in the chapters that are to follow.

CHAPTER II

WHENCE CAME THE UNIVERSE?

The Quest for an Adequate Explanation

There is a certain ancient book in the world which offers a definite solution of the profound problem of origins. The book to which we refer is the Bible. We shall note, at the beginning of our study, by means of a constructive interpretation, the kind of appeal which the biblical doctrine makes to our reason and judgment.

The problem of the origin of the universe is properly the first to challenge inquiry. The cosmos is here. That fact cannot be denied, for we cognize the universe as real, and know ourselves as a part of it. Whence came it? Much human speculation has been expended on that problem, but most of it, candor compels one to say, has been pathetically unfruitful of satisfying results. Turning to the Holy Scriptures, we cannot help noting how clearly and simply, and with what apparent ease and equanimity, the problem is explained. Here is no labored effort, no struggle with uncertainties.

The Bible opens with the stately and comprehensive statement: "In the beginning God created the heavens and the earth." When we seriously consider that declaration, does it not seem to be a most intelligible and uplifting account of the origin of the universe? It is lucidity itself. It assigns an adequate cause for all finite and palpable things. We may well ask, "What other cause

would be adequate?" In real earnestness, too, we might well raise the question, Would any one actually prefer some other than a divine origin for the universe? Further on we shall have to consider this question. For the present we leave it to simmer in the reader's mind.

There is also the problem of the genesis of life on the earth. Many learned tomes have been written for the purpose of solving that problem. As yet no adequate solution has been propounded and established by human research. If we accept the sacred Scriptures, however, the problem has a simple and rational solution; for, since God is the living, all-wise and omnipotent God, He could very easily have created the vital power or principle (the *élan vital*) as soon as the earth was ready to sustain and propagate organisms. Here again an entirely adequate cause for the after grand result has been assigned. Thus it may be said that the Bible proposes the best scientific hypothesis for the beginning of life on the earth.

There is also the problem of man's origin. Much time and labor have been expended by human reason in an effort to decipher that puzzle; yet no satisfactory scientific solution has been forthcoming. Once again we turn to the Bible where we read the pregnant statement: "And God created man in His own image; in the image of God created He him; male and female created He them." Whatever else may be thought of this teaching, it certainly may be said to be reasonable and inspiring. If it is true, it may well be called good news. One would think that everybody would rejoice on receiving the information that man had so high and holy an origin, and, therefore—to carry out the reasonable inference—must have been created for a noble purpose and a worth while destiny.

Another problem that has perturbed human thought from time immemorial is that of the origin of sin. Sin and sorrow are in the world. Whence did they come? No proposed human solution of the rise and spread of sin has gone to the root of the question; it has been left in obscurity. However, when we examine the biblical solution, we find it to be clear, simple and fundamental. Sin came into the world through the wrong choice of a free moral agent—one who was endued with the ability to choose between good and evil. How else could sin have originated and still be sin in the sense of guilt? If it came by necessity, it would not be sin, whatever else it might be called. Thus the Bible gives the deepest possible ethical solution of our problem.

At the same time it teaches that the world is a moral, not a merely mechanistic, economy—and a moral economy is the highest order of which we can form any conception.

However, even though sin has been permitted to enter the world, the Bible does not leave the human family in the lurch. What shall be said as to the origin and method of our deliverance from sin? That is perhaps the most vital of all our problems. Here again the Bible is ready with an adequate and satisfying solution. It teaches us that, "in the fullness of time," God sent His eternally begotten Son into the world to rescue and redeem man, restore to him the divine image which had been lost through sin, and bring him back into pure and happy fellowship with his Creator and Benefactor—a fellowship that is to last forever.

Surely these doctrines seem to be both rational and uplifting. One would think that everybody would want them to be true, because they solve all our most vital problems in so satisfying a way. Moreover, one would

think that all persons would make every possible effort to discover by the empirical (experimental) method whether or not this Book, which proposes so adequate a solution of life's problems, is a true and divinely inspired Book. You see, if it is the product of a divine revelation, it is not only true, but it is gloriously true.

The question immediately before us in this present study pertains to the origin of the cosmos. "Whence came the universe?" is a question that has been asked from time immemorial. It is important for human welfare that it be rightly answered. No earnest mind can be at rest and at the same time remain non-committal on this paramount issue. Let us first consider in detail the biblical solution and the kind of appeal it makes to reason.

The Definite Teaching of the Bible

"In the *beginning*." [1] Does not that seem to be the right way to begin a narrative which is meant to present a complete world-view and set forth the *rationale* of all finite things? It would not have been *finally* fundamental to begin the story at any later period in the history of the cosmos. The inspired historian was led to go back as far as it was possible for human thought to go.[2] That seems to be a reasonable mode of procedure, does it not? Then, too, if the Bible is God's revelation, it should be able to go back to the source and beginning of all finite realities.

Again, "In the beginning *God*." It would be difficult to conceive of a better way to start the universe and bring it into existence than to begin with God, the trans-

[1] Gen. i.1.
[2] See Alexander T. Ormond, *The Philosophy of Religion*.

cendent Being who has existed from eternity and who, therefore, antedates all finite things, which must have had their beginning in time. Whatever else human thought may conceive in addition, the eternal, self-existent, all-powerful, all-wise personal God constitutes the most satisfying and rational basis and cause for all finite realities. And, moreover, it is most judiciously reasonable to go back far enough to secure an adequate basis and cause of the universe. It would be superficial to stop before going back as far as it is possible for thought to go.

Observe the next crucial word in this initial verse of the Bible: "In the beginning God *created.*" Here again the biblical teaching probes into the very structure of things. The Hebrew word for "create" is *bara,* which in this place certainly means to bring into existence an entity, force, or quality, that had no prior existence. Therefore, we have here in the first verse of the Bible the great doctrine of creation *ex nihilo*. What a sublime conception for a writer living far back in the childhood of the human race to achieve and to express! How came he by it? How did it occur that he was able to phrase such a conception in such simple, lucid and dignified language? The ethnic religions teach that the gods were evolved out of the All, but their founders were never able to conceive of an all-wise and all-powerful personal God, existing from eternity, and bringing the universe into being by a direct act of creation. Even the wisest ancient philosophers, like Plato and Aristotle, were unable to rise to that exalted idea, but believed that matter was eternal and God only the framer or artificer of the universe.

Surely this supreme biblical conception of God and the creation could not have come up from beneath; it must have come down from above—from the revealing God Himself. Never could it have arisen by naturalistic evo-

lution. If it was divinely revealed to the writer of Genesis, then we have a strategic point where evolution fails to explain the facts. How did it happen, too, that only this writer of ancient times—this writer of Genesis—was able to grasp so clearly the monotheistic idea, at a time when all the other peoples of his day were steeped in polytheism and idolatry?

This initial statement of the Bible also affords a secure resting place for the earnest and inquiring soul. It satisfies man's emotional nature and aspirations, as well as his intellectual demands. For if God created the universe, it follows logically that he is able to sustain it, govern it, bring it to its divinely intended destiny, and cause "all things to work together for good to them that love Him." Here are comfort for the troubled heart and satisfaction for the intellect and reason. The Creator of the universe must also be its Sovereign. This conception, therefore, makes supreme Intelligence and Personality the force behind, and in, the universe, and that is great gain for science, philosophy and religion.

It is greatly to be regretted that Dr. James Moffatt, in his recent professed translation of the Old Testament, has woven so many of his unsupported subjective notions into his work, and thus has done despite to the Word of God. Why not give a simple, clear and literal translation? This is the way he begins the Genesiacal narrative: "This is the story of how the universe was formed. When God began to form the universe, the world was void and vacant." But that is not according to the Hebrew text. The literal translation of the first verse is this: "In the beginning God created the heavens and the earth." The first sentence of the Hebrew Bible is a complete declarative sentence, not a subordinate one. It does not begin with "When." There is no "When" in the Hebrew text.

Moreover, the Hebrew writer used the verb *bara,* which in this context means to create, and so also in Gen. i. 27. He did not use the verb *yatsar,*[3] which means to form. This new translation therefore seems to nullify the doctrine of divine creation, and imply that the material of the universe is eternal and that at a certain point of time God "began to form" it—that is, to mold it into shape. What kind of a philosophy is that? It is going back to the outmoded doctrine of Plato, Aristotle, the Gnostics and the Manicheans. How much more rational and satisfactory is the biblical doctrine of creation!

Let us now finish this great sentence: "In the beginning God created the *heavens and the earth.*" The writer mentions the "heavens" first. At that early period of the world's history the conception must somehow have been given to him that the rest of the universe is greater than this little planet on which we dwell. Yet he lived and wrote centuries before the time of Copernicus and Galileo. This initial statement seems to show that the Bible does not teach the old Ptolemaic or geocentric theory of the universe, but rather the Copernician view.

Still, the biblical scribe did not go to the opposite extreme. Subsequently he gave most of his attention to the earth, just as he should have done, because it must have been revealed to him that the earth was to be the arena of the greatest conceivable transactions, both divine and human—the creation and history of mankind and the redemption of the human family through the incarnation of the Son of God. Thus the biblical writer seems to have been endued with knowledge that transcended earthly wisdom.

[3] Gen. ii.7.

The Eternal Existence of God

At this point a counter question is likely to arise—a question of much depth and grave significance. Although difficult, it must not be evaded. We must be as thoroughgoing as possible. The question to which we refer is this: "Who made God?" There are perhaps few people who have not at some time asked that crucial question, and asked it, too, with more or less anxious concern. This problem troubled Professor Tyndall in his day. He says that sometimes he could not sleep at night for worrying over the question, "Who made God?"

How shall we deal with it? First, the question implies a contradiction; for if some other being made God, then God would not be God, but would be only a creature. When we use the word God, we mean to designate the Ultimate Being. If the question, "Who made God?" were repeated again and again, it would involve the idea of an unending series running back and back and resting on nothing; and that would be absurd. The mind would never reach a resting place.

A better way to work out the problem is this: There is something now, for the universe is here and we are here. Since there is something now, there must have always been something; for if there ever was a time when there was nothing, nothing could have ever been. *Ex nihilo nihil fit.* Therefore there must be some ultimate reality which has always existed. Since that is so, in what kind of an ultimate reality shall we believe? Is it not far and away better to believe the ultimate reality to be an all-wise and all-powerful personal God than to believe it to be only crude, insensate material substance? To put it gently, and yet bluntly, it is not more reasonable to accept a divine philosophy than a groundling philosophy?

To place back of and in the universe an omnipotent personal God is to assign an adequate cause for the cosmos and all its varied phenomena from the lowest to the highest—from the primordial material to the highest flights of human genius and the most exalted attainments of human sainthood. God as the ultimate cause explains everything. Therefore the theistic world-view is the best scientific hypothesis with which to begin our investigations.

Another mode of reasoning leads to the same conclusion. The universe seems to be a developing universe. There is good reason to believe that it was not always in its present highly developed condition, but that in the course of time it has passed through various progressive stages from an undiversified, homogeneous state to its present diversified state of heterogeneity. Perhaps its original state was the universal ether in a condition of perfect equilibrium. It is surely evident that there was a time when no life existed on the earth; there was also a time when no animals nor human beings were here. So it seems to be clear that the universe is a developing universe.

Now let us reason the matter through. If the cosmos were an eternally unfolding one, it should have reached its present status long ago; because it had eternity in which to develop. But since it has reached only its present imperfect stage of development, that fact is *prima facie* evidence that it had a beginning in time. Then it must have been created; but it could not have created itself; therefore it must have been created by some Being who never had a beginning. This reasoning leads us back to the Ultimate, Absolute, Self-existent Being—God.[4]

Thus reason itself points to the Christian world-view

[4] M. Bross Thomas, *The Biblical Idea of God.*

as the only consistent and adequate philosophy. It is encouraging and inspiring to dwell upon this beautiful agreement between the Bible and reason.

In the next place, we shall examine some world-views that differ from that which is presented in the Holy Scriptures.

The Materialistic World-View

As has so often been said, this is a materialistic age. Many of the so-called scientists of the day have gone over to a materialistic philosophy, and seem almost to exult in the idea that they have crowded God out of the world. The questionnaire of Dr. James H. Leuba [5] is all too obvious and saddening a proof of the foregoing assertion, that many American scientists have gone over to the materialistic camp.

And yet materialism is a superficial view; it holds that the only entity is matter; while those higher realities—mind, soul, spirit—are non-existent or are only epiphenomena. Thought is only the result of secretions in the brain, just as bile is the result of secretions in the liver. Is it not true, then, that the materialist thinks only in the lowest possible terms? He seems to be incapable of thinking on the higher levels; that is, in purely psychical, ethical and spiritual terms. Is it not strange and pathetic that there are people, some of them occupying high places in academic circles, who actually seem to glory in the denial of the existence of the soul and all spiritual realities? [6]

[5] *The Belief in God and Immortality.*

[6] Yet the author believes that, since 1916, and especially since the World War, there has been a decided reaction on the part of scientists toward a re-appraisal of spiritual realities and values, which is leading them to estimate them more highly, and to recognize the inadequacy of the mechanistic view of the universe.

But wherein lies the weakness of the materialistic theory? Is it a rational and scientific world-view? Let us propose a few questions to the materialist: If matter is the only reality, how could personalities like us men ever have evolved out of impersonal substance? Can something higher and nobler evolve from something lower, and that merely by means of resident forces? *Ex nihilo nihil fit.*

What the mind craves is an adequate philosophy; what the soul desires is an adequate religion. And surely materialism does not posit an adequate religious or philosophic basis for the universe, and especially for the higher and finer phenomena that it exhibits—namely, personal, ethical and spiritual experiences. On the other hand, if you put the personal, omnipotent and omniscient God portrayed in the Bible back of and in the universe, then, and then indeed and only, do you assign an adequate cause for all its phenomena.

Let us look at the question from another angle. Belief in God, or in some kind of supernatural beings, is all but universal. No tribes have been found, however low in the scale of civilization, who do not have some kind of religion, some conception of the supernatural. Religion seems to be inborn. Some one has said that "man is incurably religious." And, besides, in many countries the religion of the people is the most dominant force in their lives.

Now, if there is no entity existent but material substance, and yet it has caused almost all the peoples of the earth to believe that there is a God, then, by that very token, material substance must be a *universal falsifier!* Therefore, its testimony cannot be accepted on any account. Even when it makes the materialist believe only in material substance, it may be

fooling him! So we repeat, materialism is an inadequate philosophy.

There is a good deal in Professor D. Maill Edwards' recent book with which we cannot agree, especially his acceptance (too readily, we think) of the theory of evolution; but we cannot help rejoicing in his acute and sturdy criticism of the materialistic and mechanistic philosophy of the day. Here is a sentence which gives the materialist something to think about: "It is enough to say that, by reducing all things to matter as alone ultimately real, and thus making the lowest common measure of all things the absolute ground of them all, materialism is guilty of over-simplifying in an almost naïve way the complex facts of life and of the world." [7] A writer of such ability as Professor Edwards ought, we think, to come out openly for the full-orbed philosophy of Christian theism, including the doctrine of special creation.

Matter Not Eternal

Another humanly devised theory says that matter is eternal; therefore it was not created. Plato and Aristotle held this view; so did the Gnostics and Manicheans, who were heretics of the early Christian centuries. Plato and the Gnostics maintained that matter was evil. Aristotle denied this, although he held that God was only the framer and artificer of the universe, not its Creator.

What is defective in this theory? It is this: There cannot be two eternals subsisting side by side, nor two infinites, nor two absolutes. The absolute and the relative may subsist simultaneously, but there can be only one absolute and self-existent Being. Therefore to say that God and matter are both eternal is a contradiction, a

[7] *Philosophy of Religion, p.* 221.

metaphysical impossibility. The biblical doctrine of God as the eternal Being and the Creator of all finite and relative existences is again triumphant.

Another method of reasoning on this important point is this: If the material universe is eternal, it must be infinite; because it could not be infinite in one way, that of duration, and finite in other ways, as that conception would involve an absurdity. But the physical universe cannot be infinite, for, being composed of finite parts, it must as a whole be finite, however immense. Again, since each part is dependent on some other part or parts, it must as a whole be dependent; therefore it must finally be dependent on something that is eternal, infinite, independent, self-existent—that is, the Christian God, with whom all things are possible and who is "from everlasting to everlasting."

The Theory of a Finite God

A few words must be said regarding the modern doctrine of a finite God. John Stuart Mill held this view; also William James, and so does H. G. Wells to-day. Since sin and suffering are in the world, these men have tried to exonerate God from blame by declaring Him to be finite, and, therefore, unable to prevent their occurrence. In this way they imagine they have given a plausible theodicy. Then they add that we are in the world to help God out of His dilemma, and perhaps some time His efforts and ours combined may succeed in winning the victory over evil.

What reply shall be made to the exponents of this theory? For one thing, it is a hopeless doctrine. It makes God a helpless being, and that is fatal to anything like solid hope and comfort. If God was not powerful

and wise enough to prevent the advent of sin into the world, how will He ever be able to overcome sin? Our assistance will avail Him nothing, since, as He created us, our strength can add nothing to His power. Indeed, since the majority of people in the world do wrong and thus line themselves up in opposition to Him, that would seem only to increase His burden and make Him all the more impotent. So we see that it is a futile and dismal doctrine.[8] It is inconsistent for the Pragmatist to advocate this doctrine.

The only doctrine that can and does put courage and fiber into the human soul is the doctrine that God is supreme, all-powerful and all-wise, as the Bible portrays Him. Then it follows that, since He permitted sin to come into the world, He knew at the creation that He could deal adequately with the resulting situation and in His own good time overcome evil. God entered on no foolhardy adventure when He created the universe and constituted it a moral economy.

Can Evolution Explain the Universe?

And what shall be said of the theory of evolution, so much in vogue to-day as a world-view? This is so great a subject that it would be better to deal with it at length and in detail whenever it is taken up, and this will be done later on in this work. Yet there are a few propositions concerning it to be presented for consideration in this connection.

Many of the advocates of evolution seem to hold that it is sufficient to account for all phenomena. Instead of re-

[8] See George B. McCreary, Art. in *Bibliotheca Sacra,* Oct., 1923; A. S. Pringle-Pattison, *The Idea of God in the Light of Recent Philosophy;* and Henry C. Sheldon, *Pantheistic Dilemmas and Other Essays in Philosophy and Religion.*

maining modestly at home in the realm of empirical science, its exponents are ambitious to formulate a philosophy of the universe. So we must enter the domains of both science and philosophy in dealing with the theory.

First we must inquire: How does evolution account for the origin of matter and force? Could matter and force have been evolved out of nothing? Can evolution account for the origin of life, sentiency, self-consciousness, conscience, or spirituality?

To be evolved means to be *rolled out*. Can something be rolled out that was not previously rolled in? Evolution is defined as a series of gradual progressive changes effected by means of resident forces. That is practically Le Conte's definition, and it is the only scientific one, the only *bona fide* article. But think for a moment. Could the non-living evolve into the living by means of resident forces? Could the non-conscious evolve into the conscious? Could the non-moral evolve into the moral? Could the non-spiritual evolve into the spiritual? Is it not an axiom of human thought that every effect and event must have an adequate cause? The necessary answer to these inquiries will show the utter inadequacy of naturalistic evolution. Its champions are guilty of the logical fallacy of canceling the law of causality.

There are those, however, who advocate "theistic evolution." We have nothing but the kindliest feeling for the men who are making so heroic an effort to salvage theism and Christianity and at the same time hold on to the evolution theory. But from the viewpoints of both science and philosophy their efforts seem to be futile; for, if God is introduced as personally active in the process, that very fact nullifies evolution itself, which means progressive changes "by means of *resident* forces."

The following mode of reasoning seems to be conclusive: If God enters *personally* into the process, something new is constantly being injected from without to make it progressive and push it forward; and surely that is not what the scientists mean by evolution. That God does develop—note the word—many things in nature in a gradual way, no one will deny; but that is continents removed from what is meant by the theory of evolution. At every point where something new is inserted into the process it is *divine creation*—a fact which nullifies the evolutionary hypothesis.

Should it be said that, when God created the primordial material—perhaps the universal ether—He endued it with all the potencies needed for its subsequent evolution, and then left it to itself, to be controlled by secondary forces, we reply: That is the outworn doctrine of English Deism of the seventeenth and eighteenth centuries, which spent its force long ago and proved its futility.[9] It would mean an *absentee* God or a *spectator* God—a view repugnant even to the "modern mind," which insists on the divine immanence in all cosmical processes. Thus we think we have shown that theistic evolution is a contradiction of terms.

We propose in the place of all these humanly devised theories the doctrine of Christian theism, which makes use of at least three capital terms in accounting for the cosmos—creation, miracle, and development. Let us not suppose that we can include all the manifold divine operations in only one term. Let us not be afraid to use as many terms as are needed to account adequately for the universe and all its diversified phenomena. Only in that way can we prove ourselves to be both Christians

[9] Yet this doctrine is practically held by J. Arthur Thomson in *Science and Religion*, p. 216 and elsewhere.

and philosophers. A false simplicity is futile and solves no problems.

God the Unifier

Let us note, in a constructive way, the rationality, the "sweet reasonableness," of the biblical world-view. If God created the universe, that fact will fully account for its unity; for it is a cosmos, not a chaos. The word universe is derived from *unus,* one, and *verto,* to turn; therefore it means "turned into one." If God created it, as the Bible teaches, it must be a unity, an organism, because it was brought into being by one mind.

Now, what is one of the chief quests of philosophy? To find the unifying principle or power amid all the diversity in the cosmos. Men intuitively believe that the universe is one, else they would not call it the universe. What is the greatest and most basic unifying principle of which we know anything? It is personality—the *ego* that binds all variety into consistent and vital oneness. It is your egoity that makes and keeps you one and the same individual through all the years of your life. That is the reason you always use the first person singular when you think and speak of yourself. You always say "I" or "me," never "we" or "us."

Your body has undergone many mutations as the years have come and gone. Perhaps it does not contain a single atom that it possessed when you were a child. How many changes also have occurred in your mental processes and operations? How often your opinions have changed! How different are many of your emotions from what they once were? Your moral and spiritual faculties have undergone many alterations.

And yet you are the same person that you were in your childhood—the same *ego.* You said "I" then, and

you know you are the same "I" you were in those days. One thing has perdured through all the years—your personality; one thing has unified your life amid all its diversity—your *selfhood.*

Let us apply our argument to God and the universe. What is the one adequate unifying principle of this universe amid its limitless diversity? Our reply is: The divine personality, the divine egoity—the self-conscious God who holds all things together in beauty and concord. Where else can we find an adequate unifying principle? But granted that this philosophy is true, it is adequate. And it is the philosophy which is taught in the Holy Bible.

Another thought affords much comfort and uplifting power. The biblical doctrine of creation explains clearly the design so obvious in the cosmos. Purpose connotes intelligence and will, and they in turn imply personality; therefore the teleological argument, or the argument from design, is valid as a convincing proof of the existence of a personal God. In no other view can we find a rational explication of the obvious marks of design and adaptation in the world of nature and the realm of reason.

The Believer's Security

The biblical world-view holds another decided advantage. If God created the universe, He is its complete Sovereign; He is able to sustain and control it. He is its physical and moral Governor. Whatever in His inscrutable wisdom He may permit, you and I may feel secure that the universe can never pass beyond His control. To every opposing force, however subtle and powerful, the omnipotent One is able to say, "Thus far shalt

thou go, and no farther; here shall thy proud waves be stayed!"

And a real comfort it is to repose securely on the divine omnipotence. That is why Christians can always reëcho Paul's triumphant statement, "All things work together for good to them that love God, to them that are the called according to His purpose."

Then, too, we may rely utterly on Christ's promise, "He that believeth and is baptized shall be saved," for we know that there is no power that can thwart His eternal decree and purpose. That surely is solid comfort. The doctrine of Christian theism gives stability to the believer's life. We may confidently pillow our heads on the divine sovereignty.

The view of Christian theism also satisfies man's ethical needs. The reasoning in support of this conclusion runs as follows: There must be an ultimate ground and source of right. Every one ought to be able to cognize that principle as an axiom. For, if there ever was a time when right was not, right never could have been, for it could not have evolved out of a non-moral basis. Morality can be predicated only of personal beings with rational intelligence, moral perception and free will. We never call minerals, vegetables and animals moral beings, because they are not self-conscious personalities. Therefore the ultimate ground of right must be a person—God. This is the way that the biblical doctrine of theism teaches an adequate philosophy of the moral phenomena of the universe.

The same is true respecting man's religious needs, which are clamant in the very depths of his being. The biblical doctrine of God as a personal Creator, Preserver and Redeemer correlates with man's religious needs and aspirations, because man can hold real communion only

with a personal God. But no one can have such communion with the impersonal God of Pantheism, or the abstract idea of humanity in the Positivism of Comte.

We conclude this chapter by reiterating that the biblical doctrine of God offers the only adequate basis and explanation of all the phenomena of the universe, natural, psychical, moral and spiritual.

"We sing th' almighty power of God,
Who bade the mountains rise;
Who spread the flowing seas abroad,
And built the lofty skies.

"There's not a plant nor flower below
But makes Thy glories known;
And clouds arise and tempests blow
By order from Thy throne."

Having now attempted to vindicate the view of biblical theism and creation, we shall next investigate the status of the world as it came from the creative hand of God.

CHAPTER III

THE WORLD CREATED GOOD AND HAPPY

A New Viewpoint for Geology

Various hypotheses respecting the creation of the world have been offered in connection with the study of geology. Let us try out another hypothesis altogether and see whether it will not adequately explain all the geological data. Perhaps we shall find that the Bible, although not primarily intended as a scientific textbook, but as a book for religious guidance and instruction, is, after all, more fundamentally scientific than some of the books that were written for that specific purpose. At least, no harm can come from giving this viewpoint fair and judicial consideration.

The Pristine Status of the World

The Bible teaches that the world was originally created good; that is evident. At the end of each epoch it reports God as saying that what He had made was "good"; and at the close of the creation, after having made man in His own image, He pronounced all things "very good." [1] The Hebrew word for "very" (*me-od*) means "exceedingly" or "supremely," coming from the verb *ma-ad*, to "extend," "to lengthen out." On this crucial passage Dr. C. F. Keil,

[1] Gen. i.31.

the learned exegete and Hebraist, in his commentary on the Pentateuch, has this to say:

> God saw His work, and, behold, it was all very good; *i.e.*, everything perfect in its kind, so that every creature might reach the goal appointed by the Creator and accomplish the purpose of its existence. By the application of the term "good" to everything that God made, and the repetition of the word, with the emphasis "very" at the close of the whole creation, the existence of anything evil in the creation of God is absolutely denied, and the hypothesis entirely refuted that the six days' work merely subdued and fettered an ungodly evil principle which had already forced its way into it.[2]

To which may be added the thought that it is not probable that God would have pronounced the whole creation "very good," if the world was filled with ravenous beasts preying upon one another, and if primeval man was near kin to the brutes, and was engaged with them in a life-and-death struggle for existence. Neither is it inspiring or congruous to suppose that God would have created men and animals under such a cruel and fearsome economy and with such predacious proclivities.

It is also evident that neither men nor animals were created carnivorous.[3] Let us quote:

> And God said [to the man and woman He had created in His own image],[4] Behold, I have given you every herb yielding seed, which is upon the face of all the earth, and every tree, in which is the fruit of a tree yielding seed; to you it shall be for food:

[2] Keil, *Commentary on the Pentateuch*, p. 67.
[3] Gen. i.29, 30. [4] See v. 27.

> and to every beast of the earth, and to every bird of the heavens, and to everything that creepeth upon the earth wherein there is life, I have given every green herb for food. . . . And it was so. And God saw everything that He had made, and behold, it was very good.

On this passage Dr. Keil offers the following relevant comments:

> From this it follows that, according to the creative will of God, men were not to slaughter animals for food, nor were animals to prey upon one another; consequently, the fact which now prevails universally in nature and the order of the world, the violent and often painful destruction of life, is not a primary law of nature, nor a divine institution founded in the creation itself, but entered the world along with death at the fall of man, and became a necessity of nature through the curse of sin. It was not till after the flood that man received authority from God to employ the flesh of animals, as well as the green herb, as food,[5] and the fact that, according to the biblical view, no carnivorous animals existed at the first, may be inferred from the prophetic announcements that the cessation of sin and the complete transformation of the world into the kingdom of God are described as being accompanied by the cessation of slaughter and the eating of flesh, even in the case of the animal kingdom. With this the legends of the heathen world respecting the golden age of the past, and its return at the end of time, also correspond.[6]

[5] Gen. ix.3.
[6] See Gesenius on Isa. xi.6-8; also Keil, op. cit., p. 65.

Man's Primitive Habitat

The second chapter of Genesis describes in detail the method of the creation and fashioning of man and woman in the divine image, and this agrees with Gen. i.26, 27, which gives a more general account of their creation, the two narratives being complementary, not contradictory. The second chapter also narrates how God "planted a garden eastward in Eden; and there He put the man whom He had formed." Thus the Scriptures teach that man's primitive habitat was a garden, not a forest, not a jungle. His environments were wholly pleasant and favorable. "And out of the ground made Jehovah God to grow every tree that is pleasant to the sight and good for food."

In describing primitive man's original home the biblical writer was accurate and specific in his use of terms. He stated clearly that man was placed in a garden, using the Hebrew noun *gan.* Had he wanted to teach that primitive man was brought forth in a desert, jungle, forest or wilderness, he could have found plenty of Hebrew words to convey that idea. Here are some of them: *Choresh,* forest, thicket; *yaarah,* a forest, an outspread place; *yaar,* a forest, a wood; *yeshimon,* a desolate place; *midbar,* a wilderness, desert; *arabah,* a plain, an obscure or unknown place; *tsiyyah,* a dry place; *tohu,* ruin, desert; *chorbah,* a waste; *meshoah,* a desolation. With all these nouns at his command to designate a wild, noisome, jungle-like locality, the Hebrew writer deliberately chose the noun *gan,* which means a garden.

Man also had free access to the fruit of all the trees of the garden, except the one inhibition, "the tree of the knowledge of good and evil." The very fact that he was expressly forbidden to eat of this last tree would connote

that all the other trees were good. It is not even necessary to believe that the fruit of the inhibited tree was poisonous or unwholesome in itself, as it was placed there simply to afford man an opportunity to exercise his moral freedom—a purpose that would have been subserved even if the fruit of the tree were "good for food." A child that eats forbidden fruit disobeys his parents, and therefore does wrong, whether the fruit be wholesome or harmful.

It is true, Adam was commanded to "dress and keep" the garden; but that simply means that he was not to be a malingerer; that he was to have pleasant and varied occupation, which would only enhance his happiness. The animals and birds must also have been gentle and docile, for God brought them to the man to be named and classified. True, among all of them, "for man there was not found a help meet for him"; but that simply means that he was of a higher and different *genus* from the animals around him, and not that they were fierce and ravenous. All the circumstances connote that everything that God had made was "very good," just as was stated in the first chapter of Genesis. Thus Genesis i and ii are in beautiful accord; and, as has been said, they are complementary.

The Blight that Fell on Man and Nature

Then what calamity must have sometime occurred to cause so sad a transformation in the natural realm? In many ways, as Tennyson says, we to-day see "nature red in tooth and claw." There are many stinging, biting, noisome, venomous, carnivorous creatures in the domain of nature, and especially where nature is still in the wild. Everywhere there exists more or less of a "struggle for

existence." The witness of geology, too, is to the effect that at a very early time there were many birds and animals of prey, and that they were evidently constituted with organs, teeth, and claws, adapted for destruction. These are facts which no one can deny. Either God created nature in this state of struggle and bloodthirstiness, or in some way and for some cause the creation suffered a lapse.

The author cannot avoid a feeling of revulsion against the thought that God created men and animals in the ravenous and cruel state in which many of them are found to-day, or in the terrific condition of a life-and-death struggle for existence represented by the evolutionists. Note the repulsive picture of primitive man drawn by Mr. H. G. Wells in his *Outline of History*. If what he calls the "Old Man"—meaning the primitive man—was of that filthy and beastly nature, it would be sacrilege even to intimate that he had been created in the divine image. Just as revolting is the portrait (with the accompanying picture) of the earliest human being depicted by Dr. E. E. Free.[7] True, the biblical explanation has its difficulties, but, taken in the large and considered all in all, they are not so utterly insurmountable from the ethical viewpoint as are those theories which make God responsible for the very creation and initiation of sin and misery in the world.

How the Bible Explains the Lapse

What is the biblical explanation of nature's present status? We put it frankly: That the blight of man's sin fell upon nature's fair domain, and converted it into what it is to-day. This is taught either explicitly or implicitly

[7] *Popular Science Monthly*, March, 1923.

in a number of places in the Sacred Scriptures. We must give a careful exegesis of the biblical teaching. After Adam and Eve had sinned by eating of the forbidden fruit, they became conscious of their nakedness, and were ashamed of it. Here we have the first intimation of ugliness or repulsiveness in the world, for the connotation surely is that, before they sinned, they were beautiful and pure in the natural garb with which they were provided in their creation. But observe again. They did not slay any of the animals to make coverings for themselves, but "sewed fig-leaves together, and made for themselves girdles." [8] This proves that no blighting effect of their sin had as yet fallen upon the natural realm. The first intimation of the slaying of animals is given when, after God had pronounced His curse upon the sinning pair, this statement is made: "And Jehovah God made for Adam and his wife coats of skins, and clothed them." [9] Thus the sin of man, bringing repulsiveness and shame, necessitated the first shedding of blood in nature's domain.

The next point to which we shall advert is not quite so clear; yet we believe that proper inferences may be drawn, without eisegesis, from the language of the Bible. After the sin of man, God pronounced a curse upon the serpent, saying: "Because thou hast done this, cursed art thou above all cattle, and above every beast of the field; upon thy belly shalt thou go, and dust shalt thou eat all the days of thy life: and I will put enmity between thee and the woman, and between thy seed and her seed: he shall bruise thy head, and thou shalt bruise his heel." [10] When the statement is made that the serpent shall be cursed "above all cattle and every beast of the field," the language seems to connote that the cattle and beasts would also be under the blight, but that blight would fall

[8] Amer. Rev. Ver., margin. [9] Gen. iii.21. [10] Gen. iii.14, 15.

most heavily upon the reptile kingdom. It is also said: "Now the serpent was more subtle than any beast of the field which Jehovah God had made." [11] The serpent, therefore, although good and innocent by creation, was the representative of the class of animals which had subtlety—that is, the elements of nature which, if perverted or misused, would bring upon them the saddest and most pernicious effects, converting them from innocently acute creatures into "subtle" ones, in the bad sense of the term. In this way the blight fell in varying degrees on the whole animal kingdom, just as animals to-day possess varying degrees of repulsiveness and ferocity. So it would seem that the Bible describes the character of nature as we know it to-day.

Not only did the divine curse fall upon the animal kingdom, but also upon the ground and upon the vegetable world; for God, in speaking to Adam, used the following language: "Cursed is the ground for thy sake; in toil shalt thou eat of it all the days of thy life; thorns also and thistles shall it bring forth to thee; and thou shalt eat of the herb of the field; in the sweat of thy face shalt thou eat bread, till thou return unto the ground; for out of it wast thou taken; for dust thou art, and unto dust thou shalt return." [12]

Nothing could be plainer than that the Bible means to teach here that man's sin brought a curse upon the ground and the vegetable kingdom; thus implying that originally they were in a state of beauty and spontaneous productiveness, and could be cultivated without irksome toil. In this regard, also, the Bible is consistent in its teaching. Nature, as originally created and constituted, was not in the condition we find it now. It has suffered a lapse of some kind.

[11] Gen. iii.1. [12] Gen. iii.17-19.

From another viewpoint the biblical teaching is harmonious and self-consistent. In the first two chapters of Genesis man is everywhere represented as being the head and apex of the natural creation. He was made last, the crowning work of God, and all nature was made for him, and he was to have dominion over all the other creatures. He was not made for nature; nature was made for him. If that is true—and it is the biblical teaching—nothing can be more consistent than that, when the organic head and captain of the natural realm fell into sin, the natural creation itself should be shaken from top to bottom and should suffer a lapse of some kind. When the general of an army is slain, the army itself is thrown into confusion. When the ruler of a nation falls into disgrace, the whole nation suffers as a result. Moreover, it is inconceivable that a sinful being should dwell in a perfect habitat; hence our first parents were ejected from the garden of Eden, and placed in an environment that was suited to their fallen nature. Here again the consistency and depth of the biblical teaching are seen.

That a blight came upon the natural creation is clearly taught by the apostle Paul, who evidently looked upon sin as having had a cosmical effect. Consider carefully this statement:

> For I reckon that the sufferings of the present time are not worthy to be compared with the glory which shall be revealed to us-ward. For the earnest expectation of the creation waiteth for the revealing of the sons of God. For the creation was subjected to vanity, not of its own will, but by reason of Him who subjected it [cf. Gen. iii. 17-19]; in hope that the creation itself shall be delivered from the bondage of corruption into the liberty of the glory of

> the children of God. For we know that the whole creation groaneth and travaileth in pain together until now. And not only so, but we ourselves also, who have the first-fruits of the Spirit, even we ourselves groan within ourselves, waiting for our adoption, to wit, the redemption of our body.[13]

This is a remarkable passage. Its *indicia* are: The creation has come under a blight; it is in bondage; it has been subjected to vanity, not of its own volition, but through God's act; it is now groaning and travailing just as is the human family; it expects to be delivered from the same bondage and into the same liberty as the children of God; the time of this mutual disenthrallment will be the last day, when our bodies shall be raised from the dead. The teaching is that, as nature shares our travail, so she shall share our deliverance and coming glory. All these points agree with the teaching of the first three chapters of Genesis.

Peter speaks of "the time of the restitution of all things." [14] He also says: "But, according to His promise, we look for new heavens and a new earth, wherein dwelleth righteousness"; [15] by which may be meant that the old economy of sin and curse will pass away, and the pristine condition, with added glory through redemption, will be restored. The apostle John saw "the holy city, New Jerusalem, coming down out of heaven from God, made ready as a bride adorned for her husband. And I heard a voice out of the throne saying, Behold, the tabernacle of God is with men, and He shall dwell with them, and they shall be His people, and God Himself shall be with them, and be their God." [16] Jesus

[13] Rom. viii.18-23 (Amer. Rev. Ver.).
[14] Acts iii.21.
[15] II Pet. iii.13.
[16] Rev. xxi.2, 3.

uttered this beatitude: "Blessed are the meek; for they shall inherit the earth." [17] The prophet looked forward to a happy, restored natural dominion: "And the wolf shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fatling (shall dwell) together; and a little child shall lead them. . . . They shall not hurt nor destroy in all my holy mountain; for the earth shall be full of the knowledge of Jehovah, as the waters cover the sea." [18]

Thus we see the full-orbed teaching of the Bible: first a beautifully created world, then a fallen world, and finally a redeemed world.

How the Bible and Geology Agree

Does such a regimen agree with geology? Do not the rocks and the fossils tell a different story? Do they not indicate that many of the animals were carnivorous from the start, and that man's remote ancestors were denizens of the forest and the jungle? Did not the evolution of all things require many, many millenniums?

We must examine this matter judicially. The supposed extreme age of the fossils of animals and men is based on the theory of evolution; but that theory has not been empirically proven, because no cases of spontaneous generation and transmutation of species have ever been brought forward. From some data such inferences have been drawn by a certain class of scientists, but the inferences, in the absence of absolute proof, may be *non sequiturs*. So we must write under the hypothesis of evolution, "Not proven."

Suppose, however, before we proceed further, we examine the hypothesis in a somewhat technical way. Get

[17] Matt. v.5. [18] Isa. xi.6-9.

down your latest textbook on geology. Turn to the table giving the taxonomy of the various strata of the fossiliferous rocks. They are arranged in the following order beginning at the bottom: Primary (Archæan), having few fossils of the lowest forms from the invertebrates to the amphibians; Mesozoic (middle or intermediate life), showing fossils of birds and reptiles; Cenozoic (recent life), containing fossils of mammals and man. Let us remember this order and the names attached.

Now it would be natural for you think that, when you go out into the natural realm to study geology first-hand, you would find the various strata of fossil bearing rocks located in precisely the order above designated. The lowest and simplest forms of life would come first, and would be in the bottom rock strata, then the next higher, then the next, and so on up the scale until man is reached. That surely is the impression you would receive from looking at the classification in some of the textbooks.

But when you go to nature herself, you find that she is far from conforming to the arrangement of the system makers. There are many cases in which the Cenozoic rocks lie directly on the Primary rocks, all the intervening forms of Paleozoic and Mesozoic life being absent. Then how do the intervening forms get into their shelves in the geologist's series? They are placed there by his imagination in the interest of his theory. They are manhandled.

Again, very often, and over wide areas, the upper Mesozoic rocks lie directly and conformably on top of the lowest system in the Paleozoic age. Still further, frequently the so-called "older" rocks lie above and upon the so-called "younger" rocks. For example, the Cambrian rocks, which contain the first and simplest forms of life, often lie on top of rocks containing fossils far

advanced in the scale of organic life. Indeed, in Alberta and Montana there is an area five hundred miles long from south to north and many miles wide, where Primary (Algonkian) rocks in the southern part and Carboniferous rocks in the northern lie directly on top of the Cretaceous formations, which grade much higher in the man-made schedule. Think of it for a moment. Here are Algonkian rocks, containing no fossils, lying above the rocks containing the highest forms of life in the Mesozoic period! And this, too, over a vast area. Would that not seem to prove that the Algonkian strata were formed after the Cretaceous strata? If not, how did the latter get so deeply imbedded (hundreds of feet) under the former? The so-called "thrust-faults" will not account for the strata lying conformably upon other strata over so extended an area.

In still another way does nature refuse to submit to the manhandling of the evolutionary geologists. There is no locality on the earth where the stratification of the scientists is represented in full—no place where the arrangement by series holds good throughout; no place where the Primary rocks lie at the bottom and all the others follow in the humanly assigned succession from the lowest to the highest. The fact is, the strata occur in every possible relative order, but nowhere do they follow the serial order laid down for them by the geologists.

What is the conclusion? No geologist can prove by an appeal to the fossils and rocks that the lower forms of life came first and that the higher forms followed in clocklike order. Therefore, no geologist can prove that one form was evolved from another. According to the testimony of the rocks and fossils, the different forms of life may have existed contemporaneously in different

parts of the earth, just as they do to-day. There may have been a succession of the various forms, as the Bible teaches, but geology—studied from nature herself and not from the books—seems to indicate clearly that no great length of time was consumed in their production. If evolution and uniformity were the regnant laws in the geological ages, why do not the fossil remains occur in the regular series assigned them by the advocates of those theories? Science must be based on nature's testimony, not on the human manipulation of nature's facts.

Many geologists argue that erosion and precipitation and other mechanical action would require millions on millions of years to bring the earth to its present status. On this matter there is much difference of opinion among scientists. However, their views are based on the assumption that the same conditions that prevail now in nature's domain have always prevailed; hence the theory of Lyell, that of uniformity. But that theory has not been established by scientific demonstration. Indeed, there are many indications of great cataclysms in the history of our globe—evidences of a great deluge, of vast and destructive irruptions and shattering earthquakes. There are many evidences that once universal summer prevailed over the globe, for the remains of plants and animals of the temperate and tropical zones are found in arctic and antarctic regions. Many animal remains in those regions are still in a marvelous state of preservation, proving that they were suddenly overtaken by frigid weather and were preserved in cold storage for centuries. The so-called "thrust-faults" of the geologists, if they ever took place, would prove that at some time in the past catastrophic events must have occurred.

Let us suppose now, for the sake of the hypothesis, that the original creation was good, as Holy Writ

teaches; then came the fall of man involving the lapse of nature, causing many of the insects, birds and animals to become predacious; this condition continuing until the great cataclysm, perhaps the Noachian deluge. There is an almost universal tradition among the nations of the earth of such a vast inundation. Many of these traditions are remarkably like the flood narrative in the Bible; [19] whereas there is no ethnic tradition anywhere, so far as we know, that man has descended from an ape or a pre-ape ancestry.[20]

Now, that great cataclysm, perhaps affecting even the relative position of the earth to the sun, may have caused many upheavals of the earth, the removal of vast sections from place to place, and the covering of plants, great forests, animals and men deep beneath the ground and rocks. Thus fossils would be formed under certain conditions, and their depths beneath the earth would give no clue to their relative age. Carboniferous forests, buried deep and smothered beneath overlying soil and rocks, would form our immense coal beds. In such circumstances erosion by water, ice, snow and frost would be very rapid. A few thousand years would bring about marvelous changes in the topography of the earth.[21]

No fossils of the animals of the golden age before the fall of man can be found to-day, because that dispensation probably did not last long, and no destruction of animal life could have occurred during that perfect period.

But how shall we account for the low types of men

[19] See George A. Barton, *Archeology and the Bible*, pp. 235 ff.

[20] The theory of the evolution of man from a pre-ape pedigree is dealt with somewhat fully in subsequent chapters.

[21] See George McCready Price, *The Fundamentals of Geology; Q. E. D.: New Light on the Doctrine of Creation; The New Geology; The Phantom of Organic Evolution.*

whose fossil remains have been found? It should be noted that not *all* the fossiliferous human remains prove that these ancient men were of a low order cranially, although some of them obviously were.[22] Our reply is, there is plenty of evidence all around us of degeneration among men. You can see it everywhere; you need not hunt for it. After the flood and the confusion of tongues, tribes of men would probably venture forth from the centers of civilization into the hinterlands, and becoming separated from the rest of mankind, would naturally deteriorate, just as people in our own land have degenerated in similar circumstances within the last few hundred years.

"But they were cave-men!" some one exclaims. True enough; but about twenty-five years ago a citizen of Kansas, then living in a fine country mansion, showed us a cavity in a hillside where he and his family lived during the first few years of their residence on their homestead. There are people to-day who live in dugouts. Besides, even in these days of advanced civilization and culture in many countries, there are native tribes living in remote regions who show no higher stages of civilization than did the so-called cave men of the paleolithic age. Who can say that the cave men of central Europe were not contemporaneous with the civilized peoples of ancient Babylon, Assyria, Egypt and Turkestan? If people of all grades and types are living simultaneously on the earth now, why may not the same conditions have prevailed in remote times?

We believe that many of the facts of geology, ethnology, tradition, history and religion confirm and abet

[22] See a quotation from Henry Fairfield Osborn on the Cro-Magnon race in Chap. VIII of this volume, under the subhead "Several More Salient Points."

the biblical doctrine of creation here advanced, whereas very little data can be summoned against it. One advantage of this view is that it assigns an adequate cause for all the phenomena of the universe, those of the highest and noblest qualitative value as well as those that belong only to the mechanical and material realm. With a personal God as the Creator, making man in His own image, it is easy to account for man as a self-conscious, moral and spiritual personality, able to distinguish between right and wrong and to hold fellowship with his Maker. In this view there is no attempt to get something out of nothing, nor to evolve a greater out of a lesser, and therefore due regard is shown for the fundamental and structural law of causality.

The question may be raised why God permitted sin to enter the world and to cast its fell shadow upon the natural creation. We reply, that is a metaphysical, moral and theological question and does not belong directly to the province of natural science. We have simply been looking at the facts of the natural world, and trying to give a sufficient account of them.

However, no advantage can be gained by the objector in raising the above question, because it may be said in reply that the Power that made the world, whatever may be his name, has permitted sin to enter into the creation, and has allowed an economy of cruelty and conflict to reign in the animal kingdom. So it will win us no relief from the problem to reject the biblical solution. A theodicy in any case is more or less difficult, because we live in a world of mystery; but it would seem to be quite incongruous to suppose that God designedly implanted fierce and bloodthirsty proclivities in the animals which He brought into being, whether by creation or evolution. The tension of our thought is afforded a good

deal of relief from the doctrine that sin, the voluntary act of a free moral agent, brought suffering into the world against the will of God, and that then God in mercy carried out a plan of redemption by which, in the fullness of time, He will reinstate the pristine condition of innocence and joy in the universe and crown it with enhanced glory.

If our hypothesis is tenable and true, it will prove a decided advantage, help, and inspiration to both the scientist who is a Christian and the Christian theologian; for then both can accept the biblical teaching at its honest, literal face value, without forced eisegesis, and can at the same time correlate it with the empirical findings and conclusions of science. Perhaps in this way all conflict between religion and science may be removed.

CHAPTER IV

THE ORIGIN OF LIFE AND SPECIES

The Limits of Physical Science

A little while ago a discussion of the origin of species occurred in a well-known New York journal. There were advocates on both sides, creation and evolution, of the question. The writer was represented by two brief articles, which brought him several challenges.

One special point deserving of careful notice arose in the discussion. Our contention was that the evolution of life and species has not been proven scientifically, and that divine creation alone would account adequately for their inception. Then the challenge came to produce a specific case of creation in the natural realm.

What is to be said in reply? The question cannot be evaded. That course would not be honest and fair. The scientist has a right to raise the question and to require a satisfactory answer. If life and species did not arise by evolution, how did they arise? Frankly, that is a fair demand. The advocate of creationism should candidly admit it.

Our reply is: Physical science cannot tell us how life arose. Why? First, because the scientists find no instance of the living evolving from the non-living; second, neither do they find any instances in nature of the sudden appearance of life by creation. Thus natural science has no way of solving the problem of origins. Then what

shall be done? Shall we give up the problem and become agnostics? We think not, for agnosticism relative to vital questions can never satisfy the mind.

Whither Shall We Turn for Light?

If, then, natural science cannot prove creation (just as it cannot prove evolution), we must use some other method to validate the doctrine of creation. What is that method? Let us classify our material.

1. The Bible is a great and good book. It professes to come from God and to contain a special divine revelation. It teaches great doctrines, pure ethics, a glorious plan of salvation, and sets forth for man a marvelous destiny. It has also exercised a wonderful power for good in the world. Many persons, once steeped in sin, have been cleansed and saved by its influence and the Christ whom it sets forth. Millions of people have experienced its power and truth by conversion.

Now, it is reasonable to believe that, if such a book tells us how all things originated, it would be likely to tell the truth. If the writers of such a salutary and honest book knew nothing about the method of origins, it is probable that they would have said nothing; it is hardly thinkable that they would have tried to impose what they knew to be falsehoods or mere myths or human traditions on the human family. When you remember how all the biblical writers condemn sin, and especially falsehood and hypocrisy, it is hardly likely that they would themselves be guilty of the worst possible kind of deception. What object could they have had in advocating righteousness and at the same time practicing falsehood?

The biblical writers tell us that all things were origi-

nally created by the divine Being. But surely they could not have made that discovery by natural reason and observation; they must have learned it by divine revelation. And since they were honest men, their testimony must be true. They give us a clear-cut cosmogony in the first chapter of the Bible. It bears the marks of honesty and simplicity. How could they have known what occurred before any human being was brought into existence? They either guessed at it, and thus were deceivers, or else they received a divine revelation of the facts. We have shown how they could not have been impostors; therefore they must be credited with telling the truth. But the first chapter of Genesis positively assures us that all things originated by divine creation. Therefore we are constrained by every rational consideration to accept the Genesiacal account as true. This puts the doctrine of creation on a reasonable basis.

However, we must go further. At first, according to both science and the Bible, the earth was a dead earth. The scientists also tell us that biogenesis is the only known law in biology; life arises only from antecedent life. The Bible agrees with this view. At a certain point in the creative narrative we are told that God said: "Let the earth put forth grass, herbs yielding seed, fruit-trees bearing fruit after their kind, wherein is the seed thereof, upon the earth; and it was so. And the earth brought forth grass, herbs yielding seed after their kind, and trees bearing fruit, wherein is the seed thereof, after their kind; and God saw that it was good." [1]

Here three facts stand out clearly: First, the lowest forms of life, the vegetable forms, come first. This agrees with science. Second, the earth is commanded to "put forth" the various kinds of vegetables. As there

[1] Gen. i.11-12.

was no life in the earth before, this means that God must have created the various kinds of seeds, or germs, or germ-plasms, so that the earth could bring them forth; for nothing could come from nothing. Without a seed no plant can spring forth. The seed could not have been produced by spontaneous generation, because that has never been proven. So the seeds with their various kinds of germ-plasms must have been divinely created. Third, the biblical text tells us that all the diversified forms of vegetation brought forth "after their kind." Not one word is said about one form evolving into another. Indeed, the precise opposite is asserted—each "after its kind." The species were distinctly marked off, just as we see them to-day. Thus the Bible teaches special creation, and its teaching in respect to each organism reproducing "after its kind" agrees with our present scientific knowledge of nature's processes.

The same mode of argument will hold for the origin of the various kinds of insects, reptiles, birds, and animals depicted in the biblical cosmogony. Sometimes the Bible says that the waters or the earth "brought forth"; at other times it uses the word "create." In connection with man it uses the verbs "make," (*asah*) and "create," (*bara*). Regarding the birds and animals, the phrase, "after their kind," is used in every instance.

So far, then, the argument stands in this form: The Bible is a great and good book, exercising a most salutary influence upon the world; it teaches that origins came by direct acts of divine creation; these facts constitute a strong reason in favor of that view of origins. In the absence of any scientific demonstration of any other method of bringing something new into existence, no good reason for rejecting the biblical doctrine can be assigned.

2. No doubt the reply will be made that our method of reasoning is not empirical, because the divine authority of the Bible is the very point at issue; therefore we have been guilty of the logical fallacy of "begging the question." We, of course, expected to encounter that objection, and so we have the answer ready. The truth and divinity of the Bible have been established empirically. Do you ask, How? By experience. There are millions of people whose testimony cannot be impeached in any court, who will bear witness that once they were in darkness and sin and now they have the assurance of pardon, truth, and salvation. How did they obtain it? Through the teaching of the Bible, which sets forth Christ as the Savior of the world. Without the Bible they would know nothing of Christ and His redeeming grace and power. Therefore the Bible must be true, or no such experience could be produced by its teaching. Surely a book that prescribes a method by which people may be saved from sin, which, when tried out, is found to be effective and true—surely such a book cannot be mendacious and delusive.

The objection may be raised that Christians may have experienced the saving power and truth of Jesus Christ, but that fact does not prove that they have ever experienced the events narrated in the first and second chapters of Genesis. But the answer to this objection is also at hand. The Christ, whom the converted person has found to be true and all-powerful, placed His own stamp of endorsement on those initial chapters of the Bible; [2] therefore, if He is true, they must be true.

Does the skeptic raise the question, Is Christian experience really empirical? We reply: It is just as empirical as any other fact that impinges directly upon

[2] See Matt. xix.3-6; Mark x.2-9.

human consciousness. How do you know that you see yonder tree? By experience. How do you know that two plus two equal four? By the same kind of impression at the center of your consciousness. In the chemical laboratory when you are experimenting, how do you know that two parts of hydrogen and one of oxygen form water? By the impact which the fact makes upon your consciousness.

Now, in the spiritual laboratory how do we know that, through repentance and faith, we experience truth, pardon and salvation in Jesus Christ? By the same method —the impingement of the fact upon our consciousness. And the spiritual facts are just as clearly certified as are the natural facts. Do we not know when we are happy or when we have a clear conscience, just as certainly as we know when we see a tree or a bird? Thus the Bible can be proven to be true empirically—that is, experimentally. And if the Bible is proven true, divine creation is proved to be the method of origins.

3. Here is another effective mode of reasoning: Both science and philosophy demand an adequate cause for every event. Evolution, however, is not an adequate cause for many of the results we see in the universe. Indeed, evolution is not a force at all, or a person. It is, even if true, only a *modus operandi.* There would have to be some adequate power to push it along and some directive agency to move it forward in the line of progress. A law is only a way of working, not a power that works. But the force that operates must be sufficient. Where will the exponents of evolution find a power that is adequate to produce all the wonderful results to be accounted for? Could dead matter produce something that is not inherent in it? Could the non-sentient give rise to the sentient? Could unconscious

matter unfold into self-conscious personality? Where would be the power in unspiritual and unethical substance to produce religious and moral qualities and experiences? The word evolve means "to be rolled out." But nothing can be rolled out that was not previously rolled in. Try to *roll out* the string in a ball of twine before it has been *rolled in.*

However, place a divine Being like the God of the Bible back of the cosmos as the eternal and ultimate Reality, and you have posited a sufficient cause for every phenomenon that has appeared in the world—matter, because God is all-powerful, and therefore can create it *ex nihilo;* life, because God is a living God; mind, because God is omniscient Mind; personality, because God is the absolute Person; morality, because God is holy, loving and just; spirituality, because God is a Spirit and desires and makes possible true communion with Himself on the part of His children, created in His own image. Thus the law of causality is fully carried out in the doctrine of divine creation. The theistic world-view is the only rational and adequate one. Every other view is an attempt to get something out of nothing, or something of a higher quality out of something lower; all of which is *a priori* impossible and absurd, and lacks *a posteriori* demonstration.

The question may be raised: Why can we not prove the Bible to be true by the tests of sensuous perception and physical science? We reply: There may be wise design on God's part in establishing the principle that spiritual things can be only spiritually discerned, that spiritual truths can be known only by "being born of the Spirit." If the Bible and its spiritual truths could be known by physical tests and contacts, our holy religion would be degraded to the level of sensational

psychology and the sensuous view of life. We would lose all appreciation of the higher and finer spiritual facts, contacts and experiences. God Himself would cater to earthy methods instead of lifting men out of the lower plane into the higher spiritual realm. The biblical method, therefore, saves men from the "groundling" view of life.

4. Should the evolutionist still insist on our producing a concrete case of creation to-day, we would reply: Biblical believers do not hold that God is creating entities *ex nihilo* at the present time. In this dispensation He is sustaining and developing the cosmos which He originally created. And this, again, is precisely what the Bible teaches: [3] "And the heavens and the earth were finished, and all the host of them. And on the seventh day God finished the work which He had made; and He rested on the seventh day from all His work which He had made. And God blessed the seventh day, and hallowed it; because that in it He rested from all His work which God had created and made."

That surely is explicit. The creative work was finished. Until the next era, God works otherwise—that is, as we see Him working to-day, by sustentation, development, and redemption, and not by creation. If He found it necessary at times in human history to intervene to rescue man from sin and peril, He would do that by redemption, not by creation in the sense of bringing new entities into being. For example, in the beginning He created all the atoms, or electrons, or the universal ether; since then He has not created any additional material substance, but has molded the created matter into various forms such as best suit His purposes. The same is true of the many classes, genera, and species of vegetable

[3] Gen. ii.1-3.

and animal life. A like law obtains in the human realm. Having created the original human pair, and endued them with the power of procreation, He has, ever since, brought human beings into existence in the appointed way, the way with which we are acquainted. This tallies with the Bible, which informs us that God commanded the original pair to "be fruitful and multiply." Since the creation of the first human pair, the divinely appointed way of adding individuals to the race is that of natural procreation.

So Christian people do not expect God to create anything outright in the present dispensation, because that would be contrary to the express teaching of the Bible. He is working in a different way now. Yet He must sometime have created all entities, or they never could have come into existence.

With the evolutionist, however, the case is different. He believes that evolution is still the dominant law. He maintains that the same processes are regnant now that have always held sway. The very latest utterances of Osborn, Gregory and Free inform us that the same agelong struggle for existence and survival of the fittest is in the saddle to-day, and is bound to work out its invariable and inevitable results.[4]

But if evolution is the sovereign law to-day, we have a right to ask for direct and positive proof of its working. Everywhere it should be in evidence. We ought to have clear cases of spontaneous generation; for if it does not take place to-day, we may well ask, Why not? One would think that the present would be the most favorable time in the world's history for living matter

[4] See quotations from Osborn and Gregory in Chap. VI of this volume. For Free, see his article in *Popular Science Monthly*, March, 1923.

to evolve out of non-living matter, because the world, according to evolution, has now reached a very high point of development. The same is true of the transmutation of species. Now should be evolution's golden moment, its "accepted time." Yet it fails to improve its opportunity. Instead of one species evolving into another, things are going on in the old Bible way—every species reproducing "after its kind." Bluebirds hatch only bluebirds; flickers only flickers; chestnut-sided warblers only chestnut-sided warblers; and so on through the whole list. The only place where species improve and produce valuable varieties is where man's cultural hand is extended; and then, as soon as he withholds his guiding intelligence, nature has so little regard for the evolutionist that she invariably harks back to the original and inferior wild type.

The present would also be evolution's golden age for developing apes and monkeys into men. Five hundred million years ago (Conklin) the forbears of these animals and of man had a very poor chance to evolve into the humanoid or human status, because they had no human examples and no intelligent instructors. But the simian tribes of to-day might command the services of some of the professors of science in our universities to "teach their ideas how to shoot," if they wanted their help. And yet they persist in remaining simians, and refuse to grow more human! Why do they not come to the rescue of evolution? They are missing their chance! They cannot even learn to make a fire, or to con the alphabet, much less to study the great and uplifting doctrine of evolution!

On the other hand, the advocates of creation do not expect the animals to become human, because the Bible teaches expressly that they were not made for that pur-

pose. They were made to serve man. By their very creation and design they were of a lower genus than man, who was to be their master. When Jehovah caused them to pass before Adam in order that he might name and classify them, not one of them was found to be a fit companion for him. This proves that he was different in kind from them. Therefore God made another being, woman, of the same genus as man, so that the pair might have a rational and spiritual affinity. And as soon as the man saw the woman, he recognized her as a rational being of the same order as himself—a kindred spirit.

The conclusion to be drawn is that physical science has not the tools nor the data with which to solve the problem of origins; therefore, if this problem is to be solved, appeal must be made to sciences of a more competent order—sciences that will take all the facts into account: physical, psychical, ethical and spiritual. These sciences are called Christian Ethics and Christian Theology, and are based on the empirical data of Christian experience, which *knows* Christ to be the Redeemer and the Bible to be His ordained guide-book for life, time and eternity, His Manual of Instruction in the way of truth and righteousness.

The Doctrines of Creation and Redemption

It is wrong, as is sometimes done, to play off the doctrine of redemption against that of creation, by saying that the Bible has little to say of the latter and much to say of the former. Even if that were true, still the doctrine of creation is explicitly taught in the Bible, and therefore it must be important in God's sight, even if it is not the most outstanding doctrine. Since the Bible is God's Book, would He have inspired some one to write

the narrative of the creation if it is of negligible value? Besides, it stands to reason that creation must precede redemption, or there would be nothing to redeem. Yes, more; if the created moral being had not fallen into sin, there would have been no history of redemption to record and no doctrine of redemption to teach. All the doctrines of the Bible are bound together; they form an organic system that cannot be torn asunder without serious damage to the whole.

But what are the facts about the amount of biblical teaching accorded to creation? The person who asserts that all the Bible has to say about creation is contained in the first two chapters of Genesis, proves thereby that he has not studied the Bible carefully. In Young's *Analytical Concordance* we find that the words "creation," "create" and "Creator" occur at least sixty-five times in the Bible. Of course, the word redemption and its allied terms also occur frequently, and for that we are thankful; for it surely is a great comfort to know that the creating God is also the redeeming God. The one doctrine complements the other. The fact is, if we desire to retain our Christian faith in its integrity, undimmed and undiminished, we must accept and uphold these three great cardinal doctrines: creation, preservation and redemption. None of them would be possible without the other two, any more than a man could live without his lungs, his heart, and his brain.

Let us note how continuously the doctrine of creation runs through the Bible. We need to touch only the high points. Citations will be made from later sources than Gen. i. and ii., to show how the subsequent revelations go back to and corroborate the earliest biblical narrative. Gen. v. 1: "In the day that God created man, in the likeness of God made He him; male and female created

He them, and blessed them, and called their name Adam, in the day when they were created." Note the repetition, as if God wanted to put the matter so plainly and emphatically that no one could ever misunderstand or pervert His meaning. Gen. vi. 7: "And Jehovah said, I will destroy man whom I have created," etc. The Israelites were commanded to "remember the Sabbath day to keep it holy." Why? Because "in six days Jehovah made heaven and earth, the sea, and all that in them is, and rested on the seventh day; wherefore Jehovah blessed the Sabbath day, and hallowed it." Thus Exodus xx. 11 correlates with Gen. i. and ii. Read Deut. iv. 32: "Ask now of the days that are past, which were before thee, since the day that God created man upon the earth, and from the one end of heaven unto the other," etc. See how this verse connects Deuteronomy with Genesis in one historical narrative. It is akin to a reference on the part of an American fourth of July speaker of to-day to the Declaration of Independence of 1776.

Across the centuries runs the doctrine of creation. Note what Nehemiah says: "Thou art Jehovah, even thou alone: thou hast made heaven, the heaven of heavens, with all their host, the earth and all things that are thereon, the seas and all that is in them, and thou preservest them all." [5] Here the last historical book of the Old Testament agrees with the first book on the doctrine of creation. Isaiah is rich in similar passages: "Lift up your eyes on high, and behold who created these things." [6] "I have made the earth, and created man upon it; I, even my hands have stretched out the heavens." [7] In the following passages there are references to the garden of Eden, where, as Genesis tells us, some of the creative events took place: Isa. li. 3;

[5] Neh. ix.6. [6] Isa. xl.26. [7] Isa. xlv.12.

Ezek. xxviii. 13; xxxi. 8, and Joel ii. 3. Hear Isaiah: "For thus saith Jehovah that created the heavens, the God that formed the earth and made it, that established it and created it not a waste, that formed it to be inhabited." [8]

The Psalmist has not overlooked the doctrine of creation: "By the word of the Lord were the heavens made, and all the host of them by the breath of His mouth," etc.[9] "Happy is he that hath the God of Jacob for his help, whose hope is in the Lord his God, who made heaven and earth, the sea and all that therein is." [10] Here is another key passage: "I will lift up mine eyes unto the hills, whence cometh my help; my help cometh from Jehovah, who made heaven and earth." [11]

Neither have the New Testament writers overlooked the doctrine of creation, but have set it forth most explicitly in connection with the doctrine of grace and redemption. Our Lord Himself says, "But in the beginning of the creation male and female made He them," [12] and in referring to Gen. i. 27: "For in those days shall be tribulation such as there hath not been the like from the beginning of the creation which God created until now, and never shall be." [13] The apostle John, who so wonderfully portrays the Redeemer, thought it worth while to connect Him with the original creation: "All things were made through Him, and without Him was not anything made that hath been made." [14] So Paul speaks of "the invisible things of Him from the creation;" [15] and also that "the whole creation groaneth and travaileth together until now." [16] "By Him were all things created." [17] "And have put on the new man, that

[8] Isa. xlv.18.
[9] Ps. xxxiii.6-9.
[10] Ps. cxlvi.5-6.
[11] Ps. cxxi.12.
[12] Mark. x.6.
[13] Mark xiii.19.
[14] Jn. i.3.
[15] Rom. i.20.
[16] Rom. viii.22.
[17] Col. i.16.

is being renewed unto knowledge after the image of Him that created him." [18] Paul speaks of the woman being made from the man, not the man from the woman, and uses the word "created," [19] thus corroborating the doctrine of the original creation of man and woman. Paul did not think it necessary to play off creation against redemption, or the reverse, but upheld both doctrines, as every true biblical believer will do. In Heb. xi. 3 the writer says that "the worlds were framed by the word of God."

And what says the last book of the Bible, the Revelation of St. John? [20] "For thou didst create all things, and because of thy will they were, and were created."

As to the mode—the *how*—of divine creation, we do not presume to say, or even to venture a conjecture. No one knows how God could bring something into being that had no prior existence. That has not been revealed to mortal men, and we have no data upon which to base an assertion. We simply accept the doctrine of *creatio ex nihilo,* taught clearly in God's Word, and leave the method and the details to the time when "we shall see face to face, and shall know even also as we have been known." Some things must await the revelations of eternity. We hold that the doctrine of creation is possible, because God is and must be omnipotent; reasonable, because He surely would want to make a universe which could have come into being only by an act of creation; and uplifting, because, if He created the universe, He must be wise and powerful enough to uphold it and bring it to a worthy destiny.

[18] Col. iii.10.
[19] I Cor. xi.8, 9.
[20] Consult Rev. iii.14, iv.11, x.6.

On the other hand, the theory that the universe evolved out of nothing is *a priori* absurd and impossible. The view that matter is eternal, and that it evolved into something higher and finer than itself by means of resident forces is, on the face of it, utterly untenable, and in total contradiction to the law of causality. It is better, far and away better, to maintain a doctrine that is adequate to account for all phenomena, matter and force, science and philosophy, morals and religion—the doctrine of divine creation.

In order to be as thoroughgoing as possible, another matter demands attention. "Do you mean to teach that God, during the creative period, created each species of plants and animals separately, and constituted each to procreate after its kind? Would not that have been a colossal miracle?"

The skeptical scientist, we grant, has a right to raise that question, and it becomes the duty of the evangelical defender of the Bible to answer it frankly. Our reply is: That would, indeed, have been a great miracle—one that for a moment may almost stagger belief. However, it would have been no greater miracle than to create only one primordial germ, and endue it with sufficient fecund power to evolve from itself all the millions of different species of organisms now existing on the earth. Or suppose there were no God, what a marvel would it have been for nature herself—blind nature—to produce a living cell from dead matter, and then place within its nucleus all the potencies necessary to beget all the diverse forms of life and rational personalities now known in

the world! Any way you look at the problem, it involves a tremendous marvel. But to our mind, it is far more reasonable to believe that an all-wise and all-powerful personal God performed such a wonder than that mere fortuity, or blind nature, or natural law or force performed it.

Now, if God created the material universe, He must have created each separate electron and atom. How else could it have come into existence? Surely God could not have created all the infinitesimal particles of matter *en masse*. Try to think it through, and see how impossible that would have been. Therefore each distinct particle must have been separately created. Or, if the physicist prefers a different mode of expression, God must have created separately each distinct "center of energy" in the mighty cosmos. If God could perform so colossal a miracle in the infinitesimal realm of material substance, it would have been easily within His power to create the germ-plasm of each of the several millions of species of organisms now inhabiting the earth. However we may try to explain the universe and its origin, we are compelled to admit that supreme wonders must some time have been performed.

Moreover, the biblical account of distinct creations agrees with what we see in the organic realm to-day; namely, each species breeding true to form. The same narrative also gives an adequate explanation of the fact that each germ-plasm reproduces after its kind in the midst of thousands of other germ-plasms of different kinds. At the beginning each germ was endued with its own idiosyncrasies. Each is and always has been *sui generis*. This very fact of stability and differentiation

of type makes scientific classification possible; for if nature were in a state of flux, one type merging gradually into another, we could have no science of natural history. Science is "verified and classified knowledge."

A further thought is worthy of consideration. The theistic world-view is the only rational basis for science. If the world were not made by intelligence, it would not be intelligible. Plato elaborated that conception. He held that, since the cosmos can be interpreted by mind, it must be the product of mind. Otherwise the human mind could formulate no science. Also, if the world came only by chance, it would be a chaos, not a cosmos, for mere fortuity never could have produced an orderly world, a world whose entities are capable of scientific classification. We repeat for emphasis: If the world were not the product of an ordering mind, if it were a mere welter of things, science would be impossible. Hence we believe our proposition to be proved, that the theistic world-view is the only rational, scientific and philosophical one; hence, the only one that can be true.

CHAPTER V

THE REAL DAWN MAN

Who Was He? The Great Interrogation

Who was the being that stood at the dawn of human history looking out into the future with questioning gaze? What kind of a being was he? Was he created rational at the start? Or was he an ape-like creature of bestial lineage, just emerging into the status of human intelligence? Was he placed in a garden or evolved in a jungle?

Is the Biblical Narrative Historical and Scientific?

The purpose of this chapter will be to indicate whether the biblical account of the genesis of the human family is scientific, historical and rational, or the reverse. Perhaps we may be justified in saying at this point that, if the biblical narrative is true, it affords an adequate explanation of man, his personality, his ethical and spiritual nature. The word "adequate" is used advisedly in this context, because it seems impossible to believe that the non-personal could ever have evolved, by means of resident forces, into the personal, the unconscious into the conscious, the non-sentient into the sentient, the non-moral and non-spiritual into the moral and the spiritual. The law of causality inheres as an axiom in the very

structure of the human mind. This law is that every effect and event must have an adequate cause; that a greater entity cannot come from a lesser, or a higher quality out of a lower; that nothing can rise higher than its source.

Now, since personalities live in the world to-day, it is reasonable to believe that their ultimate cause must be a personality. Therefore, since the biblical narratives assign as the cause of man's origin an all-wise and all-powerful personal God, we can at least safely assert that this account affords an adequate cause and explanation of all human phenomena, including the highest characteristics. Can reason accept the biblical account as true? is the question we shall attempt to answer in this chapter.

According to the Scriptures, interpreted in the clear, honest, literal sense, the real dawn man and woman were brought into existence by a direct act of divine creation: "And God created man in His own image; in the image of God created He him; male and female created He them." [1] Then God immediately "blessed them," and commanded them to be "fruitful, and multiply, and replenish the earth, and subdue it;" also to have dominion over the rest of the creation. The word for "create" is used three times in the twenty-seventh verse. It is *bara* in the Hebrew—the same word that is used in the first verse of the Bible, which says, "In the beginning God created [*bara*] the heavens and the earth." To be consistent, if the word "create" in the first verse means to bring something new into existence, something that had no previous existence, it ought to carry the same meaning in the twenty-seventh verse, which recites the creation of man and woman. As a rule, the word *bara,* as used

[1] Gen. i.27.

in the Bible, means either the creation of an entity *ex nihilo,* or the initiation of some new force or condition that did not exist before. In the first chapter of the Bible, which deals with the beginning of all things, it is reasonable to believe that the writer meant by *bara* the production of an entity that had no prior existence. Therefore, by a clear exegesis of the biblical language, we conclude that the writer meant to teach that the progenitors of *Genus Homo* were given their being by a direct act of divine creation.

Some Light from Biblical Exegesis

At this point a matter of close exegesis arises. Sometimes the question is raised: When the Genesiacal record says, "Let us make man in our image," might not God have made him by the process of evolution? Also when it says, "And God created man in His own image," would it not be exegetically valid to draw the same conclusion? Our reply is as follows: The Hebrew word for "make" in verse 26 is *asah;* the word for "create" in verse 27 is *bara.* These verbs have a specific meaning; they mean to make something outright; they do not connote a growing, evolving or developing process. Had the inspired writer wanted to convey the idea of growth or development, he should have chosen the proper Hebrew verbs; of which there are quite a number. Here are some of the verbs he might and should have used if he meant to teach that man grew or was evolved: *gadal* (Gen. xxi. 8); *dagah* (Gen. xlviii. 16); *yatsa* (Job xxxi. 40); *tsamach* (Gen. ii. 5), the last meaning in some places, "to cause to grow" (Ps. civ. 14). If the Holy Spirit is the ultimate author of this creative narrative, He should have led the writer to use the correct verbs

to convey the idea of evolution, since He could have found many such verbs. Instead, however, He employed the verbs *asah,* to make, and *bara,* to create. More will be said on this point a little further on.

The impression of a direct divine act of creation is deepened by the fact that God immediately spoke to the pair, giving them explicit injunctions [2] which surely connote that they were at once endued with rational intelligence—at all events, with sufficient mentality to understand God's language.

According to the second chapter of Genesis, complementary to the first, man was made an ethical being from the start; for he was expressly forbidden to eat of the fruit of the "tree of the knowledge of good and evil." This certainly implies some perception and sense of moral distinctions. The various animals and birds were also brought before him to be named, which involved not a little intelligence. As Adam inspected and named all the animals, he made the discovery that not one of them was a suitable companion for him. "But for Adam there was not found a help meet for him." [3] Therefore another being, a woman, had to be formed, also in the divine image,[4] who would have true affinity with the man. In a clear and beautiful way, as clearly as language can make it, this unique narrative conveys to us the distinct impression that man was, and recognized himself to be, a being of a different and higher genus than the animals around him. He was unique, *sui generis.* The divine command to man to "dress" (cultivate) and to "keep" (preserve from reversion) the garden also implies an intelligence far above that of any known animal.

The foregoing analysis, it must be acknowledged, can-

[2] Gen. i.28-30. [3] Gen. ii.xx. [4] Gen. i.27.

not be made to coincide with the hypothesis of man's animal pedigree. Nowhere in the Bible is there the remotest intimation of such a view. Throughout, man is treated as if he were a rational being, belonging to a higher order than the animals. Therefore to force the biblical language into teaching the evolutionary doctrine is not to interpret, but to gloss, the Bible. It is eisegesis, not exegesis.

Sometimes the objection is raised that, had the biblical writer attempted to tell the story of man's evolution from a brute stock, he would have had to use scientific and technical terminology that the vast majority of his readers could not have understood. That is an error, He would not have needed to use a single word that an intelligent child could not comprehend. Let us try the experiment and see. Had the writer meant to teach evolution, he might have put Gen. i. 26 in this simple way: "And God said, Let us cause one of the animals to grow (*tsamach*) into a man in our image, after our likeness." Then verse 27 might have been phrased in this way: "And God caused one of the animals to grow into a man in His own image; in the image of God caused He him to grow; male and female caused He them to grow." Or perhaps this would have been better: "And God caused one of the animals to bring forth man in His own image."

That language would have been primer-like enough for any one to understand. Moreover, if the Genesiac narrative is divinely inspired, and if evolution was God's *modus operandi,* the truth should have been told.

Other supposedly acute apothegms are these: "The Bible is not a textbook of science"; "The Bible was not intended to teach science."

We reply that if the Bible is God's revelation, it surely

was intended to teach whatever it does teach. Therefore, when it recites history, it must tell the truth. When it touches on the realm of science, as it frequently does, it must touch truly. The God of the Bible is represented in the Bible as the God of the whole universe—of the natural as well as the spiritual realm. Biblical religion is of too wide a scope and too paramount a character to be set off in a corner. It touches life and experience at every point.

Let it be admitted that the Bible is not a scientific textbook. There are many technical matters of science which God has wisely left man to discover for himself as a part of his mental, moral and spiritual discipline. But if the Bible is a divinely inspired book, it must tell the truth when it deals with matters of cosmogony and anthropology, as well as when it deals with other data. The critics who think they can go through the Bible and pick out its religious element, and separate it from the rest of its teaching, have an impossible task on their hands. They will inevitably shred its cloth of gold.

Another aphorism (attributed to Galileo) is this: "The Bible is intended to teach us how to go to heaven, and not how the heavens go."

But that, too, is wrong and one-sided. It is a narrowing of the biblical teaching. The Bible tells us many things besides how to go to heaven. It teaches us how to live to the best purpose in this world. Real biblical Christians are practical. Their ethics are not mere "interim ethics," as Albert Schweitzer would have us believe. They do not spend much of their time in daydreams about "going to heaven," but take an active part in the practical affairs of the present life. Biblical religion is much broader than the religion of the dissecting critics who are enamored of evolution; for, as Paul puts

it, it "has promise of the life that now is and of that which is to come." It would be hard to conceive of a religion of vaster sweep and dimensions.

After this excursus, we shall now return to the biblical narrative. While the first chapter of Genesis gives a general account of the creation of man and woman, the second chapter supplements it by presenting a more detailed and specific delineation of the method by which they were brought into being. It will be germane to examine these passages somewhat critically, especially to note their agreement with science and reason. A classical passage is: "And Jehovah Elohim formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul." [5] Close exegesis will reveal some salient and interesting facts.

The first part of the verse, of course, refers to man's body, his physical organism. It is worth noting that the Hebrew word for "formed" is *yatsar*, which means to "form, frame, fashion." [6] It is not the verb *bara*, which is used in Genesis i. 1 and 27, describing the creation of the universe and of man. Evidently the biblical writer was inspired to choose his words with precision. Man's body was not "created" (*bara*), but was "fashioned" (*yatsar*) from material already existing—"the dust of the ground." [7] This careful use of words is indeed significant. Collating the whole biblical teaching, it leads to this conclusion—that God originally "created" the primordial material,[8] from which in course of time came the soil in the garden of Eden; and out of this soil man's physical organism was subsequently "fashioned." Hence it would have been an error on the writer's part

[5] Gen. ii.7 (Am. Rev. Ver.).
[6] See Roy's *Hebrew and English Dictionary*.
[7] Gen. ii.7. [8] Gen. i.1, 2.

to use the verb *bara* in connection with the molding of man's body, for its material or substance had already been created.[9]

But in Genesis i. 27, the writer, in describing the making of man in the divine image, used the word "create" (*bara*). How is this discriminating use of words to be interpreted? At first blush it might seem to be a contradiction, the first chapter teaching that man was "created," the second that he was "fashioned." It is on points of this kind that the documentary theory of these early chapters, and, indeed, of the whole Pentateuch, has been based and wrought out.

However, a more convincing interpretation may, we believe, be given. It is hardly probable that a writer who could teach such an exalted doctrine as the creation of the universe *ex nihilo* and of man in the divine image, would be guilty of such puerile inconsistency as flatly to contradict himself a few paragraphs further on in his narrative. All must agree that the majestic account of the creation in Genesis i. is far beyond any of the mythological accounts by other nations; for here we find pure monotheism and creation; there the grossest polytheism, as well as many absurdities that no enlightened person to-day would think of accepting as historical.[10] Even if another writer composed the narrative in the second chapter, it is not rational to think that he, or a redactor after him, would have put together two narratives in consecutive order which contained flat and evident discrepancies. They could never have expected their records to be accepted as true, if they failed to make them harmonious. At all events, it is reasonable to assume that the narrative is congruous and consistent until it has been certainly proven to be otherwise.

[9] Gen. i.1. [10] Barton, *Archeology and the Bible*, pp. 235 ff.

The Creation of Man's Soul

What, then, is the best solution of our exegetical problem? Simply this: In the first chapter (verse 27) the writer meant to teach that man's *spiritual* nature, his soul or mind, was "created" in the image of its Maker, who is portrayed in the Bible as a spiritual or psychical being. Christ Himself said, "God is a Spirit." Therefore it was man's *mind* that was created in the divine image. Psychically man is a finite replica of the infinite God.

The Genesiacal narrative also uses the word "likeness" (*demooth*), pointing to man's similarity to his Creator. In psychical substance and qualities man resembles God. God is psychical essence; so is man, so far as regards his soul or mind. God knows Himself, he is self-conscious, and can say "I." So man, although, of course, only in a finite way. God has intellect, by which He cognizes and perceives; man likewise. God has emotion; so has man. God has will, He chooses; man has also the functioning power of choice and volition.

But the Bible nowhere attributes a physical organism like the human body to God. Of course, there are anthropomorphisms in the Bible, but all intelligent readers know how to interpret them. Therefore, when the biblical writer described the origin of man's corporeal nature, he carefully refrained from using the word "create," but used the word "fashioned," or "molded." Just as carefully did he avoid saying that man was "molded" in the divine image.[11] He seemed to think that his readers would have sufficient discernment to see that he meant to teach, in the first chapter, that man's psychical nature was *created* in the divine image, while, in the

[11] Gen. i.27.

second chapter, his body was *formed* from material that had already been created. In the latter case, no creation *ex nihilo* was necessary, because no new entity was brought into existence.

The Fashioning of Man's Body

The recital of the forming of man's body from the dust (which means the finest material) of the ground seems to be based on scientific principles; for we know that, when a dead human body is analyzed by laboratory methods, it is found to be composed of precisely the same chemical constituents as the soil. Moreover, when the human body dies, it molders back to dust. The writer of Ecclesiastes says beautifully, "The dust returneth to the earth as it was, and the spirit returneth unto God who gave it." Thus there seems to be nothing incongruous or unseemly in the biblical narrative of the molding of man's body from the dust of the ground. Man is constantly taking, more or less directly, the material of the soil as food into his physical make-up, assimilating it and converting it into muscle, nerve, blood, and brain.

The word "dust" (Hebrew, *aphar*) does not mean the unclean dust of the street which is trampled under foot, nor does it mean a clod or a solid mass, "but the finest part of the material of the earth." [12] Nor does it mean that man's body was made from "mud"—a word that carries a repellent significance, and is applied to soil only when it has been thoroughly soaked with water and has become disagreeable to handle. When the fine tilth of your garden is dampened to a proper consistency for cultivation, you do not call it "mud," nor do you find

[12] Keil, *Commentary on the Pentateuch*, I, p. 78.

anything revolting about it. So the biblical writer used a refined word in this place, not a coarse and repellent one. It should be remembered, too, that he had previously said, "And God saw everything that He had made, and, behold, it was very good." [13] Nor should it be forgotten that the soil was that of a garden, not of a swamp or a jungle. So the writer meant to convey the impression that the material used was clean soil, about which there existed nothing that was repugnant.

At this point the question naturally arises, Was the framing of man's corporeal organism a direct divine act or a long-drawn process? By reading the text carefully and interpreting it at its evident face value and intent, it does not seem to lend itself to the idea of an age-long process. The narrative is quick and concise, apparently indicating action of an immediate kind. Of course, a fraction of time seems to be connoted, but it is impossible, by any correct principles of exegesis, to draw out of it the idea that the writer had any conception of millions of years having been consumed in framing the human body. If that was the fact, and the writer knew it, just a few words would have made it clear; but no such hint is given. Whatever else we do or do not do, we must treat the Bible honestly. We must not force into its language our own subjective views. The fundamental hermeneutical principle is exegesis, not eisegesis.

Let us now reread the terse passage and try to sense the impression which the writer sought to convey: "And Jehovah God formed man from the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul." What is the plain and simple meaning? It seems like direct, deliberate action, neither

[13] Gen. i.31.

hasty nor excited, nor long-drawn-out. Neither is there the slightest intimation here, or elsewhere in the Bible, that man's body was evolved by a slow, age-consuming process from the bodies of lower animals.

The reader is now referred back to a preceding paragraph, in which an exegesis of certain Hebrew words was given. In the passage now under consideration it is said that man's body was "fashioned" (*yatsar*) from the dust of the ground.[14] It is important to note that the verb *yatsar* is used. It means expressly to mold, frame, fashion. It does not mean to *grow, unfold,* or *develop.* As shown above, the writer might have used a number of Hebrew verbs to convey the idea of growth, had he desired to do so, such as *gadal, dagah, rebah, sagah, tsamach.* He might have even used the word *yatsa,* which means to grow. But he used the word *yatsar,* adding the letter *r* (Hebrew, *Res*), so careful and exact was his method. This discriminating use of verbs in the biblical narrative is undeniably impressive.

Was It a Mechanical Process?

Sometimes the allegation is made that the biblical method of bringing man into being is that of a mechanic, or carpenter, or sculptor. Nowadays many persons seem to be able to conceive of only the slow, organic method of the divine working. But that is restricting God to one method. He made the inorganic as well as the organic world. He made mechanics, carpenters, molders and sculptors, who *make* things, as well as plants and animals that *grow.* There surely is nothing dishonorable about the vocation of a skillful mechanic. The world needs mechanics just at it needs organic and growing things. If God made both, why should He not some-

[14] Gen. ii.7.

times be able to construct things outright and in a brief time, as well as cause them to germinate and develop gradually? Surely human mechanics could not have come into existence if their Maker were not a Mechanic —yes, a Master Mechanic.

Did It Show Wisdom and Skill?

Sometimes it is asserted that God would have shown more wisdom and skill had he spent many millennia in developing man from protoplasm or amoebae instead of forming him in a comparatively brief time. We reply by asking, Does it evince more skill for an automobile factory to turn out a completed, ready-to-run car every hour, or to spend two or three years in making one? Certainly, if God made man a completed rational and moral personality in a brief time, it was creditable to both His power and His wisdom. One cannot help wondering, anyway, why God should have spent uncounted ages in evolving man,[15] when He could just as easily have made him an intelligent personal being at once. Even in the organic realm God sometimes operates very rapidly; at other times He works more slowly. He is not restricted to one method. He is a God of diversity of operations, just as His cosmos is characterized by diversity and yet is a universe.

The Conjunction of Soul and Body

An important question of exegesis must now receive

[15] For example, Hendrik Van Loon, in his book, *Ancient Man,* says that it took man's ancestors more than a million years "to learn to walk on their hind legs!" How tedious! Evolution does not seem to regard man as a very "progressive" being. That being so, one cannot help wondering how it occurs that men of the so-called "modern mind" have been able to make such marvelous "progress" within the last two or three decades.

careful attention. Let us translate literally: "And Jehovah God fashioned man dust from the ground, and breathed into his nostrils the breath (*nishmath*) of lives (*chy-yim*), and man became a living (*chy-ya*) soul (*nephesh*, soul, or creature)." In Genesis i. 20, 21, 24, and 30 the same term (*nephesh chy-ya*) is applied to various kinds of living creatures. For example, in verse 21 we read: "And God created . . . every living creature (*nephesh chy-ya*) that moveth, wherewith the water swarmed, after their kind."

What is the clear teaching of this passage? That the act of divine breathing into the body which had been previously formed caused man to become a living being like the organic, animate creatures around him. We are not reading our theology or our psychology into the sacred text, but are trying to interpret it literally. So far as the words and phrases of this verse lead us, they do not distinguish man in a special way from other living creatures, for the term "living soul" is applied to them as well as to him.

Yet the biblical delineation is precisely what it should be in order to be factual and scientific. Man's likeness to the organic life around him is indicated most beautifully by his being called a "living creature." He had to be made in some respects like the animals around him, in order to fit into his natural environment. Had he been made entirely different, he would have been a misfit, an incongruity, an alien in the world. The biblical narrative itself teaches that he was to subsist on the same kind of food as that which was to nourish the animals.[16] Therefore he must have similar digestive organs. Thus we see why there are such close skeletal, muscular, digestive, respiratory and circulatory homologies between man

[16] Gen. i.29, 30.

and his animal companions; they were created to live together in the same natural environment.

Man a Unique and Distinct Genus

Yet, while these are facts and must be duly weighed, the whole connotation and atmosphere of the biblical narrative proves that man was a unique and superior being, belonging to a different order or genus from the insects, birds and animals around him. Nothing is said of their having been made in the divine image. They are made by fiat. Man is formed by a special act of a most direct kind. From the start he is spoken to and dealt with as if he were a being of rational understanding. Therefore, combining Genesis i. 27 and ii. 7, we are led to conclude that God, in the act of breathing into man's body the breath of life, also at the same moment created his mind in His own image and joined it with the living organism which He had formed. This interpretation makes the Genesiacal narrative harmonious throughout. Thus it is worthy to stand at the head of the marvelous, integral system of truth set forth in the Bible. It also ascribes to man a noble and worthy origin, designates the exalted purpose of his creation, and suggests the immortal destiny for which he was intended. At the same time it keeps him in organic contact with the realm of nature, which is to be the arena of his activities.

Man's preëminence is also indicated by his being placed in a garden, thus giving him a suitable habitat in which to begin his career. His prerogatives are connoted by his being bidden to eat freely of the fruit of the trees of the garden. His freedom and moral character are evinced by his being forbidden to eat of the

"tree of the knowledge of good and evil," and by his implied ability to obey or disobey the command. He was also to "dress and keep" the garden; he was not to be an idler. He was also commanded to name the animals as they passed before him; thus beginning the rudimentary work of scientific classification in natural history. Of course, it must not be supposed that his knowledge was encyclopedic. It was sufficient, however, to give him a good start, and a fair chance for the development of true character and the achievement of a divinely appointed destiny.

The Advent of Woman

Since man was created genetically different from the animals whom he had named, what could be done to give him true companionship and make possible the procreation of the race—to enable him to carry out the command to "be fruitful, and multiply, and replenish the earth, and subdue it"? It would seem that the wise—one might say, the sensible—thing to do would be to create or fashion another being like himself. This might have been accomplished by directly creating another human soul, molding from the ground another human body (with the differentiation of sex), breathing into it the breath of life, and then bringing the pair together in conjugal relations.

At first blush it would seem to be reasonable that this method should have been employed. But the Bible does not so teach. And why? Because then the human family would have had two distinct origins, and thus the organic unity of the race would have been precluded. A better way—a far better way—was selected. The solidarity of humankind must be established at the start.

Therefore the new human being, called woman, was taken from man, so that the divine act recorded in Genesis i. 27, "Male and female created He them," was here wrought out in detail. Man is now *Ish,* distinctly and exclusively masculine; while woman is *Isshah,* distinctly and exclusively feminine; yet they are derived from the same stock; they grow from the root of the same human genealogical tree; so that, when the man awakes from his deep sleep, and looks upon the woman before him, he at once recognizes her kinship with himself, and exclaims, "This is now bone of my bone and flesh of my flesh: she shall be called Woman, because she was taken out of Man." That psychical and somatic affinity for which he had previously sought in vain in the animal kingdom, he now perceives in the woman by direct intuition. Race solidarity and sex differentiation! Wonder of wonders!—both are achieved by one divine act. What science fails to explain, the Bible explicates most adequately.

Let us stress this point. The differences between the sexes, so marked and wonderful, have ever been the despair of the naturalists. The sex organs have such definite characteristics and adaptations as to prove design; they surely did not merely "happen." Whatever else may be thought of the biblical account of the differentiation of sex in the human world, it at least affords an adequate solution of the problem. No one would be so bold as to deny that God could have so created the souls and so framed the bodies of the first pair as to adapt them to each other, and thereby enable them to beget offspring.

A judicial and open-minded examination of the so-called "rib story" will prove that, so far from being absurd, it is sane and attractive. Much depends on one's

viewpoint. Much also depends on one's mental temper and attitude. Of course, if one is obsessed by the subjective determination to rule out the supernatural, one might as well stop before he begins with the biblical narrative. But if one is willing to admit the possibility of supernatural acts, then our problem becomes comparatively simple, for then one will admit that God is able to work in many ways, and should not be limited to but one *modus operandi.*

Let us interpret constructively the biblical narrative, "And Jehovah God said, It is not good that man should be alone; I will make him a help meet for him"; [17] or, as the American Revision puts it in the margin, "answering to him." If evolution was the divine *modus operandi,* why would God have said that the man was "alone"? Surely he could have found an animal which was a congenial mate. But note the next step in the procedure. Then the various animals were brought before him to be named, and thereby to prove to him that none of them belonged to his peculiar genus, or were fitted to be real companions for him. At this strategic point, man's need is God's opportunity. God carries out his previously announced intention to make for man a congenial helpmate.

How did He proceed? Surely in a most rational way—provided, as has been said, the presence and action of the supernatural are admitted. "And Jehovah God caused a deep sleep to fall upon Adam." Admitting that God is the primary Cause of all things, we may reasonably say that He is also ultimately the Creator of all opiates, of all skillful surgery, and of all human surgeons themselves. Nowadays our surgeons, before performing a major operation, administer an anæsthetic.

[17] Gen. ii.18.

Would not the Creator of all things know how to perform such a work, if in His wisdom it was necessary to carry forward His progressive purpose? "He that planted the ear, shall He not hear? He that formed the eye, shall He not see?" [18] Says an acute observer on this very point, "Everything out of which something new is to spring, sinks first of all into such a sleep." Here God performed something in a miraculous way that He is ever doing in the natural and ordinary way.

Next God made an incision in the man's side, and "took one of his ribs." The word "rib" (Hebrew, *tsala*) does not have a specific meaning, and so cannot be said definitely to mean what we to-day understand by a rib. Dr. Keil (previously quoted) says that the singular form means *side;* therefore the closest translation of the original Hebrew is, "He took one from his side parts." The point that is clear is that woman was taken from man's side, not from any other part of his body. To ridicule the "rib story" is, therefore, the mark of a captious spirit. It is possible to find greater depths in this ancient recital than the superficial reader is likely to detect. Our interpretation is that God took of both the *somatic and psychical seminal substance* of the man, and from it He builded the woman, thus causing her to belong genetically to the *Genus homo*. So centuries later the apostle Paul said that God "hath made of one all nations of men to dwell on all the face of the earth." [19]

Then God "closed up the flesh instead thereof." That is precisely what the surgeon does to-day after an operation, in order that nature may rebuild and repair the lost and injured section. The text says further: "And the rib (side portion) which Jehovah God had taken from the man, builded (Hebrew, *banah*) He into a

[18] Ps. xciv.9. [19] Acts xvii.26.

woman." [20] Again none of the verbs meaning to grow or develop are used here. True, this narrative describes a supernatural act; but it is neither an unnatural nor an inconceivable act for the God who has made the living cell and endued it with the power of dividing itself into two living cells. The divine Source and Author of all biological processes may well be accredited with the ability to perform a biological miracle wherever it may be required.

That God took a portion from man's *side* and from it formed the woman is beautifully significant, and connotes her equality with him. As Matthew Henry suggested long ago, God did not take her from the man's head, that she might domineer over him; nor from his feet, that he might trample her down and tyrannize over her; but from his side, close to his heart, that she might be his loving equal and companion. On this crucial narrative of the Bible the institution of Christian monogamous marriage is founded.

On the biblical narrative just analyzed Dr. Keil offers the following profound and relevant remarks:

> The woman was created, not of the dust of the earth, but from a rib of Adam, because she was formed for an inseparable unity and fellowship of life with the man, and the mode of her creation was to lay the actual foundation for the moral ordinance of marriage. As the moral idea of the unity of the human race required that man should not be created as a genus of plurality, so the moral relation of the two persons establishing the unity of the race required that man should be created first, and then the woman from the body of man. By this the

[20] Am. Rev. Ver.

> priority and superiority of the man, and the dependence of the woman upon the man, are established as the ordinance of divine creation. This ordinance forms the root of that tender love with which the man loves the woman as himself, and by which marriage becomes a type of the fellowship of love and life which exists between the Lord and His Church (Eph. vi. 6).[21]

Worth noting is the fact that, according to Gen. i. 27, God created the woman as well as the man in His own image. "Male and female created He them." Thus He made them equal at the start. The woman is not depicted as the man's inferior. This is the exalted biblical teaching which is set forth in its very first chapter. When all the contemporaneous nations held degrading conceptions of woman as compared with man, and when most pagan nations even to-day give her an inferior place, how does it occur that this early Hebrew writer obtained so high a conception of woman? Divine guidance alone is the explanation of this unique fact.

It may be added that Christ Himself refers to these Genesis passages as historical verities, and bases the sacred ordinance of monogamous marriage upon them. It would appear that Christ and His great apostle might be regarded as competent authority on the historicity of the early biblical narratives.[22]

The Biblical Account Reasonable and Uplifting

A few concluding reflections may be apropos. The biblical narrative of the origin of man, as has been

[21] Keil, *Commentary on the Pentateuch*, I, pp. 89, 90.

[22] Cf. Matt. xix.3-8; Mark x.2-9. Note also Paul's teaching, I Cor. vi.16; Eph. v.31.

shown, seems to be reasonable. If it is true, it certainly offers an adequate explanation of *Genus homo,* with his high enduements of personality, self-consciousness, and moral and spiritual qualities. What other explanation that can be offered is adequate? If Adam, created in the divine image, was the true "dawn man," we can see and feel that the human family had a noble origin, and that fact is of itself inspiring. It also follows logically that, if man were directly created in the image of God, he and his posterity must be superlatively precious in the sight of their Maker, who would fly to their rescue if they fell into error and trouble. Then, too, it is reasonable to infer that God made them for a worth while purpose, and will ultimately bring them to a destiny accordant with their personal and immortal qualities. Surely if all people would accept these teachings heartily, and live according to the ideals which they inculcate, civilization would not only be conserved, but would be rapidly advanced.

Parents Exist Before Children

The objection has been raised that at present we never see mature men and women created outright; that all human beings are generated in the natural way—are born as babies, and slowly develop into maturity; therefore, says the objector, the doctrine of creation is not based on empirical observation.

The truth of this statement is frankly conceded. But we reply that neither do we see any of the lower animals developing into human beings, nor one distinct species merging into another, nor life spontaneously generating. So far as regards the last point, the biologists frankly admit that the enormous gap between organic and in-

organic matter has grown wider by recent investigations rather than narrower. In evidence may be cited a recent book of a highly scientific character by five Yale University professors.[23]

As to the human genus, children are never brought into the world to-day save by the conjunction of two matured human beings, one male and the other female. Babies never beget babies. If babies had been made first, who would have taken care of them? It is reasonable to believe, therefore, that God started the human family by the creation and fashioning of an adult individual of each sex. This hypothesis affords an adequate solution of the problem of the genesis of the human race, and stamps man with qualities that are great and inspiring.

Since we do not to-day witness spontaneous generation, transmutation of species, and the development of animals into men, it is evident that something occurred some time in the remote past that was different from the process which we observe at the present time. We do not see anything originating *ex nihilo* to-day. Yet all finite things must have had an origin. The only sufficient and satisfying solution of the problem of origins is divine creation.

True science and philosophy always seek for causes that are adequate; hence they should seek for an adequate ultimate Cause of all finite things. Such a Cause is vividly set forth in the Sacred Scriptures of the Christian Church as the personal, eternal, all-wise, gracious, redeeming God.

[23] *The Evolution of the Earth and Its Inhabitants*, pp. 82, 83, 89, 91, 93, 94, 107.

CHAPTER VI

THE DIVINE IMAGE IN MAN

An Inspiring Doctrine

It is distinctly uplifting to learn from the Bible that God created man in His own image. The Bible story of man's creation, just as it stands in the first and second chapters of Genesis, is rational as well as inspiring, and agrees better than any other with Christian experience.

And why do we say this? Because, if we know definitely what was man's origin, we can draw rational inductions and conclusions regarding his purpose in the present life and his future destiny. To put it briefly, origin, purpose, and destiny are linked together. If man's origin is wrapped in obscurity, a like obscurity surrounds his purpose and his destiny. On the other hand, if we accept the biblical record of his origin as true, everything stands out clear and definite. If man was heaven-born, he must be heaven-tending. If God created him in His own image, He evidently designed him for a great and noble purpose. Hence it is that those who believe in biblical teaching always have the highest estimate of the value of the human individual and the human race. On the other hand, those who reject the biblical account usually do not appraise man very highly, do not esteem him much above the brute, and especially do not think of him as eternally valuable in the sight of God. Some of them hold that nature does not care for the

individual, but seeks only to preserve and propagate the race.

Now, what are some of the evidences that man was created in the divine image? One of them is this: Man is able to hold communion with God, to talk with Him, and to receive in his soul the assurance that God hears and answers his petitions. This is a fact of experience; as the learned men say, it is "empirical"; and that is the basis and viewpoint of all science to-day. If God and man were not similar, if they had no real kinship, there could be no fellowship between them. The plants and animals cannot know God and speak to Him, because there is no such similarity between them and their Maker as makes personal communion possible. Communion implies community of natures.

Another cogent proof that man was made in the divine image is that when the divine Son of God came into the realm of time and space to redeem mankind, He assumed human nature; He ensphered Himself, as you might say, in human nature. Had there been no likeness between human nature and the divine nature, this would have been an abnormal and even a monstrous conjunction. But if man was originally made in the divine image, the incarnation of the Son of God in human form was a congruous and normal act. While it was *super*-natural, it was not *un*natural.

Hence it is that great scholars and theologians like Dr. James Orr (now deceased) hold that God, foreknowing that man, as a free moral agent, would sin, created him in His own image, so that, in the fullness of time, the divine Son might be able to assume human nature in a real and organic way, and yet do no violence to the constitution of either the divine or the human nature.

There is still another proof—and a conclusive one—

that the biblical doctrine of man's creation in the divine image is a true doctrine. It is the evidence of Christian experience. The Bible teaches that when a person is regenerated, the divine image within him has been restored. Note this statement: "The new man which is renewed unto knowledge after the image of Him that created him"; [1] also: "Put on the new man, which after God hath been created in righteousness and true holiness"; or, according to the literal translation, "holiness of the truth." [2] Can it be that, when the soul is converted and the divine image is restored, the soul does not know it? Would God regenerate a person and not impart to him the knowledge of the divine work begotten within him? Nay, nay, we must not think so meanly of God. Paul says: "The Spirit Himself beareth witness with our spirit that we are the children of God." [3] If we are God's children, we must have been made in His image, and by the Spirit's witness within us we know it.

When you visit a zoölogical garden, and look into the cages of apes, monkeys and chimpanzees, what kind of a reaction do you experience? Do you feel in your soul that you are a descendant of them, or that you have sprung from the same stock as they? Are you not rather revolted by the thought? But now turn to the Bible; read the first chapter of Genesis, that great narrative of the creation of the universe; read on to verses 26 and 27: "And God said, Let us make man in our own image, after our likeness; and let them have dominion over the fish of the sea. . . . And God created man in His own image; in the image of God created He him." Does not that appeal to the best that is in you? Does it not genuinely uplift you? Does not the statement there cor-

[1] Col. iii.10. [2] Eph. iv.24. [3] Rom. viii.16.

respond with the experience of the divine image that has been recreated within you by the Holy Spirit?

In What the Divine Image Consists

Stated in the simplest terms, the divine image means man's likeness to his Maker. An image is a likeness. When you look into a mirror, you see an image of yourself. When you look at a photograph of yourself, whether large or small, you are looking at your image. If the picture does not resemble you, you say it is not your likeness. We say of a son, "He is the image of his father."

So man was originally created in the image of God. In certain important respects, therefore, man must be a finite replica of the infinite God. In what, then, does the divine image in man consist?

Man is a dual being. He is composed of body and soul. We would not venture so far as to say that his body is formed in the divine image. We cannot speak definitely on this point, much less dogmatically, for we know nothing about the form of God. A Swedenborgian once told us that he and his school believe that God is an infinite man, and has the form of a man, even man's physical form. However, we think that is giving too much rein to speculation. The Scriptures teach that God is a Spirit, and we know nothing of the form of spiritual substance. Our own minds, too, are of spiritual or psychical substance, but we know nothing of their form.

What, then, are we warranted in saying about man's physical organism in connection with the divine image? This much at least: When God determined to create the human soul (for "mind" and "soul" are terms that mean the same psychical entity), and to frame for it a

body for its dwelling place and organ, He formed the body in such a way as to make it a suitable habitation and instrument for its rational tenant. The mind and body were made compatible and complementary. Therefore, we are justified in saying that the human body has such correspondence with the being of God that nothing unnatural or incongruous was done when the Son of God assumed a human body and functioned through it while He dwelt here among men, and then bore it to the right hand of God to be glorified. We certainly can say that the human body as divinely fashioned in Eden was not out of harmony with the divine form and essence.

However, it was specifically the mind of man that was created in the divine image. First, the psychical nature of man is composed of like substance with the being of God; for God is spiritual or psychical substance, and so is man's mind or soul. They are not the same substance, but similar substance; [4] for man's soul is a creation, not an emanation from God. Hence we may call this the *essential* image of God in man; namely, that man's mental nature is of the same kind of essence as the being of God.

However, man's mind is not mere unformed or unorganized essence; it is essence constituted as a personality. Man is self-conscious; he can say "I." He can know himself and distinguish himself from other personalities and other objects. The same is true of God; He is also a person, with self-consciousness and egoity.

[4] In theological terminology we would say that the soul or mind of man in its relation to the essence of God is *homoiousios,* not *homoöusios*—that is, of similar substance, not the same substance. Man's soul is psychical substance, and is therefore similar to the being of God, but it is created substance, not a mere emanation from God, as the pantheists teach. However, in speaking of the divine nature of the Father, Son and Holy Ghost in the Trinity, we would use the term *homoöusios,* the *same* substance.

In this respect we are like Him, made in His image; but with this difference—He is infinite and we are finite.

Again, the human mind has three great functioning powers—intellect, sensibility (emotion) and will. It knows or cognizes; it feels; it determines and moves itself. Here also man is like God, who knows, feels and wills. This second element of resemblance between man and God may be styled the *psychical* image.

Once more, man's mind or soul was not created without moral and spiritual quality; in other words, it was not created in an indifferent or a sinful state. It was created with what is known as "original righteousness." As God is holy, so man was created holy. Nor was this holiness merely an accident or a superadded quality; it was inherent in the very nature and constitution of our first parents. It was concreated. This great attribute of man, as he came originally from the creative hand of God, might be called the *moral and spiritual* image. It is in this sense that the terms "divine image" and "image of God," are most frequently employed in the Holy Scriptures, in the confessions of the Church, and in our Christian theologies.

What has been said will not, we hope, be regarded as idle speculation. Whatever helps us to understand biblical teaching more clearly helps us to be better and happier Christians. If we are like God in so many ways, we certainly will be inspired to seek after more intimate communion with Him, for then we can see and feel how natural and reasonable such communion is; and, besides, if sin has come into our being and has disturbed, obscured, or entirely broken off that fellowship, we can see how divine grace may come to recreate us, and restore us to God's favor, by repristinating the divine image within us.

At this point we may inquire regarding the effect of sin upon these various elements of the divine image in man. The *essential* image was in nowise destroyed by sin, because the substance of man's soul still remains intact. The error of Flacius, that the essence of human nature became sin in the Fall, has always been rejected by the Church. If a building were burned down, we would say, in everyday language, that it was "destroyed"; but we know that only its form was changed; that every atom and electron still remains without alteration. So with the *essential* image.

Neither was the *psychical* image destroyed. But it was sadly marred, weakened, and corrupted. Man is still a self-conscious person since the fall, but how perverted that psychical power is! Man still knows, but how poorly and erroneously his intellect often functions! He still feels, but how greatly are his emotions corrupted! He still can choose, in some ways, but how wrong, feeble and perverse his volitions are!

But the *spiritual* image has been totally lost. Thus man in the natural state is said to be "dead in trespasses and sins"; "the natural man receiveth not the things of the Spirit of God"; "the carnal mind is enmity against God"; "except one be born from above, he cannot see the kingdom of God." Yes, the image of original righteousness is totally lost, so that no man, however gifted otherwise, can come to God and have fellowship with Him, until the Holy Spirit first comes to him, awakens, illumines and regenerates him. This is done by the Holy Spirit through the means of grace, which are the Word of God and the holy sacraments. God does not leave us to ourselves, however; by His call and illumination He initiates within us the work of grace. Hence He says to the man who is dead in sin, "Awake, thou that sleepest,

and arise from the dead, and Christ will give thee light." He who created man in His own image is able and willing to restore that similitude which man by his own perversity has forfeited.

Thinking on the Higher Levels

An appeal is herewith made for thinking on a higher plane. Many people, we fear, keep their eyes too much on the ground, prone to evaluate everything in terms of materiality and animalism. Many of the scientific books and articles of the day are filled with dissertations on the lowest forms of life and the animal world. Physical parallels between man and the animals are set forth galore. Man has the same kind of skeleton, muscles, lungs, digestive organs and glands as many of the animals.

While these physical resemblances exist, it is true, they are sadly overemphasized. Too many of our scientists are bent on looking down; they do not have the upward look, the higher vision.

Even as we are writing this chapter, there comes to our desk an article reporting the conclusion of several learned scientists—eminent university men—that man has descended from the gorilla, because the big toe of that animal bears some resemblance to man's big toe! The examination of the toes was most technical and painstaking. Some men seem to be engaged in pretty trivial business in order to prove their favorite theory of man's brute pedigree! With them it appears to have become an obsession. We would simply ask how the gorilla's foot should have been constructed in order to serve its particular purpose.

Again, is not the human foot admirably adapted to

meet man's need for balancing, walking and running? How could it have been better designed? Why can we not look higher, and see the purpose of God in all these wonderful animal and human structures? And as for their resemblance, they simply prove the unity of God's plan; that He created them thus because He wanted a unified and orderly world instead of a chaotic one.

We protest against the prevailing fashion of looking only or chiefly at the homologies existing between man and his animal neighbors, on the ground that that is the lowest and most materialistic view we can take. Moreover, we must enter our *caveat* against the modern disposition to measure men's intellectual and moral caliber by the size of their brains. There are many people with comparatively small brains who have excellent minds and good hearts. On the other hand, there are many people who have large skulls and brains, and yet have small mental powers and bad moral character. So far as the writer can recall, the largest human head he ever saw contained a very inferior mind. In contrast to this fact, he knows a college professor who has a very small cranium, but there functions in and through it a most acute and cultured mind. Empirically judged, much more depends on the quality than on the quantity of a man's cerebral material. It may be, too, that much more depends on the quality of the mind itself as a psychical entity than upon its material instrument. In this advanced age of the world we should not allow ourselves to become slaves to materialism.

Our challenge is not for the denial of any established facts in science, but for a change of emphasis. Suppose we think of the many differences between men and animals and give more attention to man's higher qualities and powers. To differentiate well is a mark of clear

thinking. Note how limited are the faculties of the animals in comparison with those of human beings. The best animals, long as many of them have been domesticated, cannot learn to con even the simple alphabet, nor to read a single line, nor to solve the simplest arithmetical problem, nor to use the simplest syllogism, nor to obtain the faintest conception of the universe, the purpose and destiny of man, nor of God, the Ultimate Reality. The difference is not that of continents; it is *toto coelo*—a difference of the whole heaven. Man is not merely an *editio de luxe* of the animal kingdom. He is in a class by himself.

Then why not think on higher levels and in higher terms? Let us interpret man in the light of his creation in the divine image instead of in terms of the image of the sub-ape. Let our psychologists give more attention to man's higher intellectual, moral, and spiritual faculties, instead of dwelling so much on mere brain organism, neurons, glands and molecular action. Suppose we try to rise to the Psalmist's conception of the dignity of man when he exclaimed, "Thou hast made him a little lower than God (Elohim)." Let us look up, and not down! It will help us to be more noble; it will give us a loftier uplook and a wider outlook, and lead us to a higher conception of ourselves and our fellowmen.

The Proper Appraisal of Man

A logical induction may be drawn from the foregoing considerations; an induction, too, of grave importance, having a most practical bearing on human life and civilization. According to Genesis i. 31, "God saw everything that He had made, and, behold, it was very good." The adverb "very" (*meod*), as has previously been said,

means supremely, superlatively. Therefore the creation as it came from God's hand was perfect, without fault or flaw. This high appraisement of the divine handiwork comes after, and therefore includes, the creation of man. Thus man was pronounced "very good"—a statement that can hardly be construed to mean that he was a being of a low order just emerging from animalism, like the brutal being pictured by the sponsors of evolution.[5]

If man was created directly in the divine similitude, it must follow logically that he was of supreme value in God's sight. Every statement in the Genesis narrative connotes this. Created in the image of God, a sentient and reasonable being, his Maker certainly would care for him; and if he fell into sin and trouble, He would hasten to his rescue, just as would an earthly father in like circumstances. Thus created, man is a child of God. Then each one of us in whom the divine image has been restored through faith in Christ, may claim to be "the child of a King!" And this King is the King of kings and Lord of lords, the Sovereign of the universe! Furthermore, if man was created in the divine image, God would value him so highly as to regard it worth His while to send His eternally begotten Son into the world to rescue man and restore him to the divine favor and fellowship. And still more; it would follow rationally that God would prepare an eternal destiny for a sentient and rational being created in His own similitude.

In this way the whole teaching of the Bible on the doctrine of man and his importance holds together;

[5] For pictures of man's primitive beastly status, according to evolutionary teaching, see *McClure's Magazine,* March, 1923, in connection with an article by Hugh Weir, who reports "authoritative interviews" with Henry Fairfield Osborn and William King Gregory. An analysis of the article by Mr. Weir, "The Dawn Man," will be found in the next chapter. See also the pictures accompanying Dr. E. E. Free's article in *Popular Science Monthly,* March, 1923.

everywhere the supreme value of man is emphasized. Divine unity in the doctrine of anthropology marks the picture drawn in Holy Writ. The Book is not a mass of *disjecta membra.* In its early chapters it describes Paradise founded and lost; in its last chapters it describes Paradise regained.

Man's Value and the Vast Universe

The biblical estimate of man's importance differs from the pronouncements of some of the scientists of the day, who seek to shrivel us up with a sense of our extreme insignificance in the presence of the vastness of the physical universe. They glory in informing us of its immensity in comparison with the littleness of man. They declare—and declare truly—that the sun is many times larger than the earth; that many of the stars are larger than our sun; that, indeed, the universe is so vast that our planet is like a mere mote in the air in comparison; that an individual man is of less significance than a single grain of sand on all the seashores of the earth. Herbert Spencer, the arch-agnostic, ridiculed the Bible in this way: What do you think of a book, he asked, which tells us that the Inscrutable Power which is occupied with swinging the vast orbs of the universe through space on so tremendous a scale, came down here upon this tiny speck of an earth to converse with a Syrian shepherd? He meant Abraham. Scarcely more than two years ago an evolutionist made the following statement before a meeting of scientists: "Man is of far less importance than he thinks he is. He is nothing but an insect buzzing in the air for a moment, and living on a little planet, the earth, which will last only for an instant!" And no pro-

test came from the assemblage at the time, and since then none has been heard!

And what shall we say to these things? Shall we deny that the universe is so immense? No! We rather rejoice in its vastness; for the greater it is the greater God is—God whom we trust, serve, and worship. And the greater God is, the more competent is He to preserve and govern His universe as a whole and in all its parts. A God who can create and sustain so colossal a universe must be able to care for every part of it even to the smallest detail. And the more efficiently He can watch over and take an interest in its minutiæ, and at the same time rule over it in its entirety, the greater a being He must be. So we rejoice as Christians in the immensity of God's dominions, and are able to trust Him all the more; for so great a God surely must also be good, holy and merciful.

Therefore we refuse to be intimidated in the presence of mere material bulk. Whether technically educated or not, Christian people have sufficient acuteness to distinguish between quantity and quality; and with them quality is by far the more essential element. This truth holds even in the material realm. Here is a huge boulder composed of common substance. It might be sold for a few pennies. Here is also a diamond, many times smaller, flashing from a hundred facets all the colors of the spectrum; and yet, small as it is, it is worth thousands of dollars. What marks the difference in value? Quality! The boulder is common stone; the diamond is crystallized carbon.

Let us apply the parable. Quantitatively a rational, immortal soul may not occupy large space, but qualitatively it is of more value than any conceivable amount of mere insensate physical substance.

Man's Qualitative Importance

Let us indicate how much greater you as a rational being are than the material cosmos, before whose vast dimensions so many people stand in awe. You are a person; you have self-consciousness; you can say "I," and you know what you mean. The universe is not a person; it is not self-conscious; it cannot say "I." Again, you can cognize objects and persons other than yourself. You can apprehend the universe and many of its phenomena. The universe, however vast, cannot do that; it possesses no power of cognition or reason or other intellectual processes. Think of another contrast: You have feeling and emotion. You can love; love your wife, husband, children, parents, fellow men, God. What a great prerogative to be thus endowed! You can hope; you can aspire after high ideals. The universe can do none of these things; it is stirred by no emotions.

As a rational soul, you have still another regal enduement—that of free will or volition. You can choose between two paths; and what is more, you can choose between good and evil, right and wrong. What a royal gift! The sun, moon and planets cannot do that; neither can Arcturus, nor Sirius, nor the North Star, nor the Big Dipper, nor the Little Dipper, nor the Big Bear, nor the Little Bear, nor the Pleiades, nor all of them put together. They have no power of choice; they are mere mechanisms, moved by necessity. Thus you see that, qualitatively, you are greater than they, greater than the universe.

Another proof of the same truth is the fact that, with your imagination—which might be defined as the stretching power of the mind—you can extend your thought to the outermost rim of the universe, and then on beyond. It is true, you cannot think on and on to the end; but

you can think in terms larger than the universe. All of which is demonstrated proof that qualitatively you are greater than the material universe.

There is no need, therefore, to belittle man; no need to try to shrink him up into atomic proportions. Created in the image of God, man has much that is intrinsically great about him. He is God's most precious object and possession in all His vast cosmos. If you were walking along a country road, twirling a common pebble in your hand, and by accident it should drop into a mud-puddle by the wayside, you would hardly care to soil your hands and cuffs to recover it. On the other hand, if you were holding a valuable diamond in your hand, and should chance to drop it into a muddy pool, you would not hesitate to soil your hands and cuffs to rescue it. Let us apply the parable. Man is God's choicest jewel in the creation, having been made in His own similitude, a sentient, self-conscious, rational being; and so, when he falls into sin and trouble, God feels that it is worth His while to send His only begotten Son into this sinful world of ours, and even to soil His heavenly garments thereby, being "made sin" for man, in order to rescue him, purify, and reburnish him, and make him fit for happy and eternal fellowship with his Maker. Is not this a high and holy doctrine? Is it not an uplifting truth?

Man a Sinner—Unworthy, but not Worthless

It may be objected that man is a sinner, and therefore is not, after all, of much value in God's sight. The Christian will not deny man's sinfulness, but it does not follow from that fact that he is not precious in the divine estimation. On account of his sin, man may be *unworthy,* but he is not *worthless.* The diamond which falls

into the muddy pool is not rendered worthless thereby. No; its intrinsic value is not in the least diminished. If you can recover it, you will wash away its soilure and reburnish it until it glitters in its pristine luster, and then it may be even more precious to you than before, because "that which was lost has been found." So with God's diamond, the human soul; when recovered and restored, it may be only the more precious in His sight.

We have now tried to delineate, according to the Holy Scriptures, the high evaluation that God places upon the human race and also upon the individual man. Jesus illustrates this truth by His three parables of lost things—the lost sheep, the lost coin and the lost son, the last being known as the parable of the Prodigal Son. How graphically Jesus describes the shepherd seeking for his lost sheep, the woman's search for her lost coin, the solicitude of the father for the return of his wayward son, and the glad welcome home at last! Then Jesus said: "Verily, verily I say unto you, There is joy in the presence of the angels of God over one sinner that repenteth." Recall, too, His blessing the little children, and saying, "Suffer the little children to come unto me, and forbid them not, for of such is the kingdom of heaven." This beautiful incident is all the more significant if we remember that it was the eternal Son of God, King of kings and Lord of lords, who took those children up in His arms and blessed them. It proves that He, the Eternal One, the only one really able to estimate eternal values, looked upon each little child as an immortal soul capable of a never-ending destiny. No wonder He said on another occasion, "Even so it is not the will of your Father in heaven that one of these little ones should perish."

It follows, therefore, from this discussion that we must not despise ourselves, even though quantitatively we are

proportionately so small and the universe so large. It is quality, not quantity, that counts for most in God's kingdom.

Why God Created so Vast a Universe

Then why, it may be asked, did God make so vast a universe? The latest scientific calculation which we have seen informs us that the diameter of the cosmos is seventeen trillion billion miles. Of course, no man can be sure that such calculations are correct. But we do not feel the least revulsion against the colossal figures just named, or the least trepidation in the face of them. Then why, we repeat, did God make so vast a universe? Our answer is: Because He had previously determined to create immortal beings like us men, and He graciously planned for them a vast and ample arena for their never-ending activities and development! Eternity is long; therefore God has provided and will provide endless diversity and continual discovery and adventure in the destiny He has prepared for His children. Listen to His own words spoken through the inspired apostle: "Blessed be the God and Father of our Lord and Savior Jesus Christ, who hath begotten us again unto a lively hope, by the resurrection of Jesus Christ from the dead, unto an inheritance incorruptible and undefiled and that fadeth not away, reserved in heaven for us."

Well may we say, in view of these facts, that man was not made for the universe, but the universe for man. Between death and the resurrection man's soul or spirit, in the disembodied state, will exist in a purely spiritual realm in conscious and happy fellowship with God and the angels and the "spirits of just men made perfect"; then will come the judgment and the resurrection, when

man's risen body, now completely glorified, will be reunited with his redeemed soul; and at last man, in the totality of his being, will start forth in his unending career of possibility and glory in the infinite spiritual universe and the glorified material universe. When Paul exclaimed, "All things are yours," he was simply giving to the children of God a prophetic survey of their illimitable possessions. "The Spirit Himself beareth witness with our spirit that we are the children of God; and if children, then heirs; heirs of God and joint-heirs with Jesus Christ, if so be that we suffer with Him that we may also be glorified together."

CHAPTER VII

THE DAWN MAN OF EVOLUTION

Was He a Real or an Imaginary Being?

An elaborate article, which appeared in a recent number of a well-known literary magazine,[1] contained a discussion of the problem of "The Dawn Man," according to the theory of evolution. The article, written by Mr. Hugh Weir in a sprightly manner, professed to be "an authorized interview" (see the sub-title) with Henry Fairfield Osborn, President of the American Museum of Natural History, New York, and William King Gregory, Curator of the Department of Anatomy in that institution. Both of the scientists named are outspoken upholders of the evolution of the human family from the Primates—the original stock from which the monkeys, apes and men were developed. The article is copiously illustrated by Charles R. Knight, whose pictures are so arranged as to exhibit marked similarities between the skulls, skeletons and physiognomy of man and the simians. Primitive man is represented as a near-brute, a brother—or at least a cousin—to the anthropoid ape.[2] At this point it may be said that the entire article, in both the descriptive and the pictorial parts, is redolent of the den, the lair and the

[1] *McClure's Magazine*, March, 1923.

[2] See picture on page 21 of the magazine noted above. Note also the portrait of primitive man in upper right-hand corner of page 31 of *Popular Science Monthly*, March, 1923.

jungle, but there is present in it none of the aroma of the garden of Eden.

It may be well to analyze this production somewhat closely to discover whether its data are scientific, and whether the inferences drawn from certain facts are logical conclusions or *non sequiturs*. Was the Dawn Man of the evolutionists a real being, or is he only a creature of their fertile imagination?

Man's Origin a Religious Question

In the first place, it must be said that this article dealing with one of the most vital questions of all times, namely, the origin of man, is totally devoid of any religious element. God is never mentioned; the supernatural, except in a casual way, is utterly disregarded; there is not the slightest intimation that man might have been made, fashioned or created in the divine image. So far as regards the witness of these deponents, man came up by purely natural processes of evolution from a bestial stock, and is therefore a cousin to the ape, whose image and superscription he still continues to bear. Whether he bears in the slightest measure any resemblance to God—on that point, these devotees of evolution give not the vaguest hint.

The demur may be made that Drs. Osborn and Gregory are pure scientists, who do not raise the religious question at all, but simply follow the leadings of nature; therefore their findings have nothing to do with religion and theology. But that is not sound reasoning. Any teaching that deals with the origin of man intrudes, *ipso facto*, on the domain of religion. Why? Because the Christian Scriptures, received as true and divinely inspired by millions of honest and intelligent people (and

tax-paying citizens as well), present a lucid and definite account of the genesis of the human race, and declare that the progenitors of *genus homo* were directly created in the image of God.[3] Therefore, when evolutionists give a different explanation of man's origin, and never even so much as mention God in connection therewith, they run squarely athwart the sincere and earnest convictions of multitudes of Christian people. And whether they mean to do so or not, they are invading the territory of religion.

But there are at least two places in this article where an evident intention to discredit the biblical recital of man's origin appears. In the early part of the paper Mr. Weir makes the following statements: "Did modern man, as we know him to-day, come full formed into this world? Science calls the human race, as we see ourselves, *homo sapiens,* meaning the man that can think, reason, understand. Was this man a product of instantaneous creation or of gradual evolution?"

Here are two obvious references to the Genesitic account of man's creation. A little further on Mr. Weir says: "In order to obtain the most complete and accurate answers to these queries, they were carried to the American Museum of Natural History, the institution that, under the direction of Henry Fairfield Osborn, ranks as one of the world's leading authorities on the antiquity of the human race." The answer to Mr. Weir's "queries" there received was that man was slowly evolved; that he was not instantaneously created. The question, therefore, is extremely germane: Does evolution occupy a neutral attitude toward biblical teaching? Does it stay out of the realm of theology?

Later on in the article, a direct quotation is given from Dr. Osborn, who said: "Man as we know him did not

[3] Gen. i.27.

come into the world overnight. He was not created instantly."

While this statement is a caricature and is satirical in tone, it certainly was meant to discount the biblical narrative of man's creation. Thus it is futile for any one to blind himself to the facts and go on believing that the theory of evolution as set forth by Osborn and his school does not join issue with biblical theology. Two methods —the biblical and the evolutionary—of accounting for the origin of *homo sapiens* will inevitably have to be compared, and if they clash, every one must see the conflict, and must make his choice.

The Scientific Phase of the Problem

However, suppose we examine the arguments—rather, the *ipse dixits*—of Drs. Osborn and Gregory, as well as those of their reporter, Mr. Weir, to discover whether or not the theory of the evolution of man from a bestial stock has been empirically established. Are the data sound? Are the generalizations which are drawn from the scattered facts logical and conclusive? These are pivotal questions.

Near the beginning of his article, Mr. Weir makes this statement: "Somewhere in the recesses of remote antiquity the human race began. Just where or how is a matter largely of conjecture, theory, speculation."

If that is true—and, of course, it is—one cannot help wondering why the evolutionists assert so dogmatically that man is evolved from a simian or primate stock, and insist on the right to teach the doctrine as if it were scientifically demonstrated.

Of one thing Dr. Osborn seems to be sure. Speaking of man's pedigree, he says: "He certainly is not descended

from any existing or known true monkey. Man has a long line of ancestry of his own, reaching perhaps two million years into the dim shadows of time. The growth of man through the ages was parallel to that of the family of apes and monkeys, but representing a stock absolutely separate and distinct."

This means that man's remote ancestors were creatures still lower in the scale than the present-day apes and monkeys. Do the evolutionists imagine that this view makes their theory more palatable? Dr. Osborn continues :

> Man's ancestors were undoubtedly monkey-like or ape-like creatures. But to assume that this admission means that man is descended from, or is now only a changed form of, ape or monkey is to assume an absurdity. The common ancestors of *homo sapiens* and present-day apes and monkeys were mammals of the Primate stem. Ages ago, perhaps five million or more years, the Primates began, in the process of evolution, to split into groups, separate and distinct, which developed into the progenitors of man, the modern ape, and the modern monkey.

The Primates themselves, Dr. Osborn holds, grew up from the same stem as the other mammals, but for some cause gradually grew away from them. Then came some

> . . . strange families of monkeys, extinct now for hundreds of thousands of years. . . . These passed, while the main stem, still groping its way, gave forth the first of the anthropoid apes. Gradually yet another stock was set apart and diverged, a humanoid stock, consisting of what might aptly be termed ex-

> perimental or tentative man. While the ape stock was creating respectively the living orangs, the gibbons, the chimpanzees, the gorillas, and some of their extinct ancestors, the first humanoid stock, distinguished by larger skulls and better brains, was making various experiments in the forerunners of modern man.

While the human race is thus "a definite product of evolution, an ascending evolution," from these animal predecessors, yet Dr. Osborn assures us that "for at least a million years it [the human race] was distinct and apart from the purely animal stock."

At this juncture some remarks are pertinent. First, Dr. Osborn seems to be absolutely sure of what occurred "perhaps five million or more years" ago. We know of no dogmaticians of ancient or medieval times who spoke so positively of supposed events of so remote an age. They were quite modest in comparison. Second, the assurance that men did not descend directly from the monkeys and apes of to-day affords no comfort, when in the same breath we are told that we must trace our lineage to animals still lower in the scale—that is, to sub-monkeys and pre-apes. Third, the scientist's description of primeval man, a beastly creature, "undoubtedly monkey-like or ape-like," carries a very different spirit from that of the first and second chapters of Genesis, which tell us plainly that our progenitors were created in the divine image, were human and rational from the start, pure and innocent, able to choose between good and evil and to understand their Maker's commands, and intelligent enough to name the various kinds of animals; and that they had for their habitat a fruitful garden which they were to dress and keep. Who would presume to

go so far as to assert that the jungle brute-man represented by the evolutionists as pugnacious, vicious, and destructive, was created in the divine image? Who would be so adventurous as to try to identify such a creature with the first man of Genesis?

Dr. Osborn may agree with some of his fellow scientists in asserting that man is not descended from any modern monkeys or apes, but not all evolutionists are of the same opinion. For example, Dr. Joseph McCabe says:

> We come of a remote animal ancestor. What was it like, and how and why did it become man? I have said that it is now customary to explain very carefully that our ancestor was *not* a monkey or an ape. I confess that I think this caution is overdone. It is a concession to the spiritual police. If we had the remains of man's ancestors before us, they would almost certainly be classed as those of monkeys in the earlier stage and apes in the later. Possibly some of them are actually among existing fossils.[4]

So the scientists are not agreed, after all, as to who was man's primogenitor.

Were Man's Ancestors Tree Folk?

On another point Dr. Osborn fails to agree with what was once practically the consensus among evolutionists. He says: "Our ancestors or predecessors lived among the forests. Undoubtedly most of their time was spent on the ground. The trees, however, offered refuge from storm and danger, and the human brain was quick to see such an advantage." Elsewhere he says: "It must be

[4] *The A B C of Evolution*, pp. 107, 108.

emphasized that the prehistoric man did not live in trees like the ape and monkeys, and that he walked erect."

But for many years we have been assured that man's ancestor was an arboreal creature, with a long tail and a hairy body, swinging about in the trees in company with his simian relatives. Jack London's remarkable story, *Before Adam,* was based on this once-sure conclusion of the scientists. Only a short time ago a scientist declared that young babies are able to wag their big toes—a sure proof, he asserted, that mankind has descended from animals which once clambered agilely about in the trees. The same conclusion was drawn from the fact that, when modern men dream of falling, they always wake up before they reach the ground; the reason being that their paleolithic predecessors who fell from their arboreal perches clear to the ground never lived to tell the story and to transmit it to their posterity; while those who caught themselves in time survived to tell the tale.

It must be admitted that prehistoric man, if Dr. Osborn is correct, did not act as intelligently as did the simians. He should have continued to cultivate the fine art of tree-climbing, because the trees would always have "offered refuge from storm and danger." Yet Dr. Osborn says that "the human brain was quick to see such an advantage." But somehow, man failed to improve his chances, while the monkeys acted more wisely. What an advantage it would have been many times in the course of human events, if, in the presence of angry dogs, ravenous wolves, wild hogs and mad bulls, man had been an expert tree-climber! It seems a pity that he decided to become a hopeless groundling! But in this case, what becomes of the claim of the evolutionist—that man's superior brain gave him a decided advantage over his ani-

mal associates in the forests primeval? Is evolution consistent with itself?

The Meager Fossil Remains

Our scientists try to explain the difficulty of tracing man's evolution by means of "unbroken chains of fossil evidence"—that is, why the human fossil remains are so meager in comparison with the fossils of other creatures of the geological ages. It is because the others lived on the plains, "where the elements had a better chance to preserve their bones for posterity"; whereas the Primates—the "dawn" folk and their kin—dwelt in the forests. "This fact, together with the absence of any definite form of burial, made the fossil remains of prehistoric man exceedingly rare," avers Dr. Osborn. "Upon death the humic acid of the forest leaves hastened the decay of man's ancestors."

But if the fossil remains of prehistoric man are "exceedingly rare," how can the scientists be sure that they have found the missing links and have proved evolution by actual data? Those missing fossils are precisely the materials needed to establish the theory of evolution on a solid scientific basis, and if they have not been found, scientists have no right to assume that they ever existed. Here is a proposition that ought to appeal to the scientific mind: If evolution is the dominant law in nature, there ought to be abundant and unmistakable evidence of it everywhere. The Founder of that law should have seen to it that the fossiliferous proofs of it were not destroyed. He ought not to have left it to conjecture and imagination to supply these evidences. Moreover, if evolution is the regnant principle in nature, we should see clear proof

of it to-day by demonstrations before our eyes of both spontaneous generation and transmutation of species. How does it occur that, instead of a prevailing law of fluent and gradually merging types, we find everywhere to-day the laws of biogenesis (life only from antecedent life) and stability of type (every species reproducing "after its kind")? If evolution ever held the ruling position, why did it resign in favor of a principle that is precisely its antithesis? These questions deserve earnest consideration.

The Ape's Failure to Make Progress

An interesting subject discussed in Mr. Weir's article is "the ape's failure to keep up." We are glad he does not wholly evade that problem, for almost every schoolboy will pose it.

> What is behind the mystery of men's rapid development, while the ape and monkey, of the same stock, are still animal? What was the spark that, some fifteen hundred thousand years ago, sent the humanoid branch of the Primate stock on a path of glory to an ultimate position "a little lower than the angels"?

Mr. Weir pries still further into the subject:

> Science answers "Evolution," or "Adaptation," or "Natural Selection." But the layman, pressing his *whys* and *hows*, seeks more of the secret. The ape, he knows, has toiled along the long path of evolution together with man; yet to-day the ape cannot speak, cannot form the simplest rude instrument. Man's remote ancestors, hundreds of thousands of

years ago, formed rude instruments and spoke to one another. What, then, was the cause of man's development [and of] the ape's failure to keep step?

These were the crucial questions that Mr. Weir put to his mentors. What was the answer? That God designed and created man to be a rational being of a higher order and a different genus from the animals around him? No, indeed! "Glands!" said Dr. Gregory. . . . "It is safe to assume that the action of glandular secretions in the humanoid stock, particularly the pituitary gland, was responsible for the rapid brain development and structural changes, the erect posture, shorter teeth, speech, and other characteristics that distinguish man from the ape."

And then Mr Weir, seemingly satisfied with this rejoinder, lost his acumen and interrogatory mental frame, and forgot to ask how and why man came to have such a superior glandular outfit! How did he come by it, while none of the apes, baboons and gibbons around him ever got it? Something unusual must have occurred to start the humanoid branch of the Primate family on the gland highway. Does any logical thinker believe for a moment that Dr. Gregory gives an adequate explanation of why the ape lagged behind, while man forged ahead?

Here is a simple question: If the animal parents of the first humanoid creature had no ductless glands, thyroid and pituitary, how did he, their offspring, come by them? Could they have evolved out of nothing? Did the remote brute-man get these valuable acquisitions by accident? If one would dare to introduce a personal God at that strategic point in man's development, one would, at least, be ascribing the result to an adequate cause. However, in that case an act of *creation* would have taken place. Yes, the birth of a kind of gland different from

any that existed previously would have required an act of creation.

Now, if God entered at any point into the process with creative power, whether man welcomed Him or not, it is much more reasonable to believe that He created man outright in His own image, as the Bible teaches, rather than that he dragged him up from the slime through polyps, mollusks, worms, reptiles, birds, filthy and ravenous beasts, and consumed æons on æons in doing so. If it be admitted that there is a God—and most people seem to be willing to admit it—the biblical way of producing man seems to be more reasonable and attractive. It hardly seems to be plausible that He would have evolved man by an age-long process from a bestial stock. One cannot help wondering, at all events, why He would have selected so tedious and roundabout a method.

The Dawn Man of Piltdown

We shall point out some other weak places—what might be called drop-stitches—in the logical processes of the devotees of evolution. Dr. Osborn thinks that the most important discovery relating to the origin of man is the finding of the remains of the so-called "Dawn Man of Piltdown." [5] It may not be important, but we are seriously impressed with the meagerness and uncertainty of the data. Here is an admission that affords little encouragement for the belief that evolution has been empirically established. "When we remember that an entire century of exploration in all parts of the globe for remains of prehistoric man has yielded us only five species, nearly or remotely related to modern man, the diffi-

[5] *Eoanthropus.*

culty of locating fossils of any scientific value will be understood." It would seem, then, that evolutionists ought not to speak with so much assurance on the subject.

Regarding the evidential value of the Piltdown Man, the following facts should be noted: The first find occurred in 1911, and consisted of a "part of a fossilized skull bone." Afterward were found "a portion of the jaw-bone, several important parts of the skull, three teeth, and the remains of several flint instruments." Dr. Osborn admits that this was "a slender result." In 1917, about two miles from the first discovery, the following remains were found: "a first lower molar tooth, a bit of bone of the forehead near the right eyebrow, and the middle part of the occipital bone of the skull." When these were "placed side by side with the corresponding fossils of the first discovery, they agreed precisely." Now "there was not the shadow of a doubt," for the two grinding teeth differed only in age, showing that the owner of the first was considerably older than the owner of the second.

But the evidence is not quite so convincing as it appears; for Dr. Gregory afterward says that the question of the size of the brain is a moot one among scientists.

> Unfortunately several pieces of critical importance are missing from the middle of the skull top [he says]. This has made possible markedly different opinions of experts. If the pieces of the skull are placed close together, the brain would be a very small one, estimated at about 1,070 cubic centimeters. If these same pieces are tilted upward and moved farther apart, the brain capacity would be as large as that of modern man, nearly 1,500 cubic centimeters. The revised estimate of Elliot Smith and others

places the brain size somewhat below 1,300 cubic centimeters.

Thus we see what an air of uncertainty surrounds this "most important discovery." Just a slight tilt or manipulation of the skull pieces would give us a man with a modern cranial capacity. The latest decision is only an "estimate," which means a guess. And what a strange result was the combination of these meager fossil remains! Dr. Gregory says that it "was unexpected and in a way unprecedented." The greater part of the head, he says, is distinctly human in character, although of a low type, while the lower jaw and the dentition are prevailingly simian or ape-like. Thus we have a mongrel, with a head like a man and a jaw like an ape.

What is there to prevent our believing that the skull pieces belonged to a man, while the teeth and jawbone belonged to a member of the simian tribe? Nothing whatever. Professor Gerrit S. Miller, of the United States National Museum, a scientist who had ample material for comparison, declared that "the jaw and tooth belong to a fossil chimpanzee." Our quotation is from Professor Ales Hrdlicka, another well-known scientist, who agrees with Professor Miller's statement. Professor Hrdlicka also asserts that "none of the conclusions regarding the Piltdown Man should be accepted, and that all hypotheses relating to it must be regarded as more or less premature." A German anatomist, Professor G. Schwalbe, who is often quoted as an authority by Dr. Osborn, declared that "the proper restoration of the Piltdown fragments would make them belong, not to any preceding stage of man, but to a well-developed, good-sized *homo sapiens*, the true man of to-day." The well-known scientist, Sir Ray Lancaster, also asserted that the jaw

and skull of the so-called Piltdown Man never belonged to the same creature.

More damaging testimony of the same kind regarding *Eoanthropus* might be given, but it is unnecessary.

Moreover, we have looked critically again and again at the photo of the "restored" Dawn Man, as he appears in the American Museum of Natural History, and must confess that he looks very much like a human being (of a somewhat coarse type) and very little like an ape. Compare him with the "restoration" of the Trinil Man by his side. He has even a more human aspect than the Neanderthal Man, who is supposed to be the next higher product of human evolution. His jaw protrudes a little more, but his other features are finer and more prepossessing. It is due to add here that Professor Arthur Keith, curator of the Royal College of Surgeons, London, held that the Piltdown Man's cranial capacity was about 1,500 cubic centimeters instead of only 1,070; while Professor W. Boyd Dawkins contended that the remains of the Piltdown gravel beds belonged to the Pleistocene and later periods and not to the earlier Pliocene, as was first proclaimed in order to give *Eoanthropus* a greater antiquity.

Now, in view of all these differences of opinion among eminent scientists, was it quite right and frank for Drs. Osborn and Gregory to assert in such a categorical tone that the Piltdown Man was one of the missing links in human evolution from a pre-ape and sub-monkey stock? It would, at least, have been aboveboard to state that some capable scientists have given a different interpretation of the Piltdown data.

The same dubiety might be shown to surround the Trinil Man (the Ape Man of Java), the Heidelberg Man ("reconstructed" from a single bone), the Neanderthal

Man, and the Oligocene Man of Egypt (restored, according to Osborn, from "a small fossil jaw").

Concerning the Status of the Humanoid People

But let us next consider the status of the Dawn Man and his successors. Of the Piltdown Man, Dr. Osborn says: "Brute strength undoubtedly ruled him, as with the animals. It was a case of the survival of the fittest—every individual for himself. . . . His must have been a constant fight for life, not only against the elements, but against the animals—the extinct cave bear, the cave lion, the cave hyena, the woolly rhinoceros, and the mammoth —all, like himself, extinct."

It is evident, then, that the Dawn Men of the evolutionists bore no resemblance to the first Man of the Bible, who was created in the divine image; nor was their environment in any way similar to his. Thus the two accounts—that of the Bible and that of evolution—seem to be irreconcilable.

The status of succeeding humanoid folk was little better. Says Dr. Osborn: "We can picture a continual warfare between the Cro-Magnons and the Neanderthals, the latter fighting a hopeless battle for their very existence against a foe with larger and more active brain. . . . It was a case always of the complete extermination of the weak by the strong. The law of the survival of the fittest is not a theory, but a fact."

Again it is plain that neither the Neanderthal nor the Cro-Magnon species can be identified with the Genesiac Man created in the divine image.

But is this brute law of struggle and extermination still operative? Referring to such folk as the aborigines of Australia, Dr. Gregory speaks frankly: "The fate of

such inferior people is sealed. They will be wiped out just as surely, just as relentlessly, though perhaps in a more humane and less primitive fashion, as the Cro-Magnon exterminated the Neanderthal. The law of the survival of the fittest operates still."

Let it be noted that the law of the jungle is, according to high authorities on evolution, still in the saddle; it is still the regnant principle. Suppose that such conceptions should some time prevail among all people throughout the world, what would be their influence on civilization? Instead of sending missionaries and teachers to pagan peoples, the policy of evolution would be to duplicate the Hun-like savagery and brutality of the Cro-Magnon race! It is little wonder that many good people shrink from the logical outcome of such teaching. Let it be remembered that a leading evolutionist in a dominant position in our country has just declared: "The fate of such inferior people is sealed. . . . The law of the survival of the fittest operates still." Would Nietzsche have expressed himself with more brutal frankness?

Some Unwarranted Inferences from Fossils

Are the evolutionists consistent in their reasoning? Have they mastered the rules of logical praxis? Let us see. "The immediate predecessors of modern man," says Dr. Osborn, "were the race known as the Cro-Magnon, which made its appearance in Europe during the Upper Paleolithic age geologically, or from 15,000 to 20,000 B.C." Before this the Neanderthal race was supreme. Now note what Dr. Osborn says: "The Cro-Magnons, appearing suddenly among these creatures (the Neanderthals), came from the south, probably from the region of the Mediterranean. They were the nearest approach

to man yet evolved." Then they made ruthless warfare on the Neanderthal race, and destroyed them root and branch.

From this description it is evident that the Cro-Magnon tribe did not evolve from the next lower type, the Neanderthal tribe. Surely they would not have turned upon and ruthlessly destroyed their own forebears. Then from what stock did they come? Who were their predecessors? They appeared "suddenly" among the poor Neanderthals, and began the work of *Schrecklichkeit.* Yet in the pictures of the "reconstructed" men, the Neanderthal Man immediately precedes the Cro-Magnon Man, giving the impression that they represent a gradual evolution and a genetic relationship. However, in another picture or diagram [6] the Heidelberg and Neanderthal men are represented as offshoots from the main humanoid stem, while the Piltdown Man immediately precedes the Cro-Magnon representative. But note this: The Piltdown fragments were found in England; the Cro-Magnons came "probably" from "the region of the Mediterranean." The Heidelberg and Neanderthal men are represented in this diagram as being the descendants of *Pithecanthropus erectus* (the Trinil Man); yet the fossil remains of the first two were found in central Europe, while those of the last were discovered in far-off Java! Thus, it would appear, the evolutionists are hard pressed, in both their logic and their natural history, to establish the missing link.

The diagram previously referred to is a marvel of ingenuity. It represents, on a graduated scale, "the ascent of man" from an animal far down in the Cretaceous Period up to the finest and most cultured looking recent Caucasian gentleman. Almost any one can see that it is

[6] See page 22 of the above-named magazine.

a "framed up" scale. No such gradient scale has ever been observed by scientists. In not an instance has it been proved by empirical observation that one species has been transmuted into the next higher. In the world of nature to-day, right before our eyes, we have all the various types and grades of animals here set forth, but in every case each reproduces "after its kind." We see no evidence of one kind merging into another. What proof can be adduced that nature ever operated in a method different from that which we know to-day?

Our champions of evolution declare that "the ape or monkey can never become a man." "The evolution of the apes to-day is away from rather than toward man." The gorilla is devoluting instead of evoluting. And why is this so? "The trouble with the apes and monkeys was that they were not progressive." Yes, that explains it! And a profound and adequate explanation it is! Why did not the world figure out so obvious a solution of the problem long ago? While man was moving forward and upward through the ages, "the monkeys and apes took a conservative course." In this way the learned scientists of the day cut the Gordian knot! Only, it must be added, "it might have been the action of glands" that caused man to forge ahead of his simian confreres! Here we may rest our case. It would create confusion and embarrassment in the councils of the evolutionists to inquire why the apes and monkeys were not progressive and how man came into possession of those transforming glands!

CHAPTER VIII

THE REASONING OF AN EVOLUTIONIST

Is it Clear and Logical?

The evolutionist to whom reference is made in the title of this chapter is Edwin Grant Conklin, Professor of Biology in Princeton University and a well-known advocate of evolution. Since he is a professional scientist, his conclusions amount to an authoritative *dictum* with many people. Anent the present debate over evolution, he recently issued a brochure entitled *Evolution and the Bible*. We have read it with care, and, while we admit that the author offers some counts in favor of his theory, he also commits what we cannot help regarding as some serious errors. While he is a renowned physical scientist, his logical sagacity does not seem to be on a par with his zeal for scientific research. We shall try to make this assertion clear as we proceed.

The Present Uprising Against Evolution

To begin at the beginning, he regards the present uprising against evolution as "a curious recrudescence of the old theological fight of fifty years ago." This is a historical misstatement. All along, from the days of Darwin, Huxley and Spencer, evangelical scholars have been opposing evolution and pointing out its scientific inadequacies; this has been done over and over again, year

by year, as we might show from abundant citations. But their arguments have been printed in works issued, for the most part, by religious publishers, and so the evolutionists have either ignored them or have been unconscious of their existence. Thus they have gone on in their self-confident way until they have made evolution a popular fad, not to say a furor, have put it into many school books and other publications for children and young people, and have broadcasted their theories over the world in the newspapers and popular magazines. This popular propaganda has naturally brought the opponents of the theory, including several well-known laymen of popular qualities, out into the public forum. The present opposition to evolution is therefore no "recrudescence"; it is merely a matter of new found publicity. The scientists, going along in their self-complacent way, were evidently all unaware of the existence of this powerful undercurrent of opposition to their teaching, until they were awakened by the publicity given to it through the newspapers and magazines. Ever since the days of Gladstone's and Dean Wace's controversies with Huxley and other of its advocates, there has been a broad and deep current of opposition to evolution.

Our scientist thinks that the present "movement" against evolution is "partly due to the increased emotionalism let loose by the war." This is another wrong induction; for the opponents of evolution are not controlled by emotionalism; what they demand, above all, is sound empirical demonstration. For example, to point out two specific instances, they want to see actual proof of spontaneous generation and the transmutation of species. Their objections to the theory are largely scientific. In science they want demonstration, not speculation or mere probable inference. If the theory of evolution is ever

proven to be true, it will then be time enough for Christian scholars to see whether they can adjust their theological views to the theory.

Dubiety Regarding the Causes of Evolution

Another of our evolutionist's miscues is this: "Uncertainty as to the causes of evolution has been interpreted by many non-scientific persons as throwing doubt upon its truth." This is repeated several times in this leaflet. But it is a plain case of missing the mark. Anti-evolutionists do not ask the advocates of the theory to point out the *causes* of evolution. That is not the crux at all. What they demand is the *fact,* not the causes. To be specific, they want to be shown just one clear case of living matter evolving from non-living matter. If such an instance can be brought forward in the clear light of demonstration, they will not trouble any scientist to tell them what caused such an evolution to take place. So also, if an actual case of the transformation of species can be produced, they will not demand that the scientists point out the causes; they will accept the scientific demonstration. To illustrate, theologians accept the doctrine of gravitation because it has been sufficiently validated; they do not dispute the doctrine because scientists cannot explain the "causes." No one can explain human life and consciousness, but no one, on that account, goes about denying the existence of human life and consciousness.

Professor Conklin expresses surprise that his scientific theory should be opposed on the ground that it is "not supported by certain literal and narrow interpretations of Bible texts." Here is another logical fallacy: the terms "literal" and "narrow" do not belong to the same logical category. An interpretation may be literal without being

narrow. We are interpreting Professor Conklin literally, but not narrowly. So with the treatment of the Bible. Moreover, is not the literal interpretation of the Bible the only honest interpretation? Is not that the way to interpret all literature? If a writer expresses himself in a literal way, we certainly ought to give his language a literal exegesis. We have no right to read into his speech a meaning which he does not express or imply; no right to make him say something that he never meant to say; no right to call his narrative allegory when it is one which he obviously intended to be accepted as history.

The Question of Science and Evolution

Our polemicist speaks of "those who wield the sword of a militant faith against science." Several times he accuses theologians of opposing "science" because they oppose "evolution." Here is another case of the logical fallacy of the *hysteron proteron,* which is tantamount to begging the question. It is not a fact that evangelical theologians are opposed to science. They are lovers of science. Some most eloquent tributes to science have come from the pens of evangelical theologians. They are not convinced, however, that the theory of evolution is entitled to the name of science. Hence they oppose only those human speculations which have not yet been established by scientific proof. The present writer has been a lover and student of natural science for over fifty years; and has been waiting all this time for the evolutionists to fill up the hiatuses and to find the missing links in support of their theory. Scientists should have sufficient acumen to discriminate between science and unproved hypotheses—*Bene docet qui bene distinguit.*

No Danger of Religious Persecution

We cannot sympathize with our evolutionist's fear of a religious inquisition, an *Index Prohibitus,* or an *auto-da-fe.* There is small danger to-day that evolutionists will have to go to the stake, or suffer from thumbscrews, or endure the tortures of broiling in a hot cauldron. It seems strange that whenever liberalists and evolutionists are confronted with vigorous arguments, they straightway begin to raise the cry of "persecution." To say the least, this does not strike us as brave or manly.[1]

A further serious reflection may be in order here. Judging from the many threatening gestures of the evolutionists, the angry spirit they often display, the derision they heap upon their opponents, and their apparent desire to force their teaching, whether or no, on the tax-supported schools of our country—judging by these facts, one cannot help wondering whether they might not resort to persecution if they should ever gain the upperhand in public affairs. Human nature, especially in its unspiritual state, is not to be trusted when it succeeds in getting into control. Might we not have another "reign of terror," such as marked the French Revolution? Anxiety may especially be felt in view of the fact that some of the leading advocates of evolution hold that the law of the

[1] A scientist in *Harper's Magazine* for December, 1923, after referring to the Holy Inquisitors, who, as everybody knows, lived centuries ago and in the dark ages, goes on in this wise: "To-day their kindred spirits are attempting to forbid the study of biology, and they would put us in irons and send us to prison if we expound comparative anatomy." Why should any person make such a charge? Conservative believers have no such design or desire. They love science and want it taught. They object only to the teaching of speculations and conjectures as if they were established facts. More than that, it is not manly for scientists to complain about "persecution." Let them be brave in contending for their views, and they will at least win the respect of their opponents.

struggle for existence and the survival of the fittest—the law of the jungle—is still the dominant law in the world. At all events, we may be sure that, if the evolutionists should ever gain the dominancy, they would overwhelm their opponents with ridicule.

Many Christians, indeed, have suffered martyrdom. In the early centuries of the Christian era thousands of them were tortured and put to death in the most inhuman ways by pagan unbelievers. But they suffered bravely, uncomplainingly. Even the two noble women, Perpetua and Felicitas, walked into the arena of the Amphitheater at Rome to be devoured by wild beasts, and they endured without a whimper. During the Middle Ages most of the people who were persecuted were Christians. Very few scientists and unbelievers have ever suffered any real persecution. Only one scientist, so far as we can recall, was ever put to death—Giordano Bruno; and even of his case Dr. Louis T. More has this to say: "The burning of Giordano Bruno in 1600 is often cited as an example of the prevailing attitude of the church toward science. While it was a futile attempt to crush heresy, science was not in the least involved, as Bruno was in no sense a man of science." [2]

What About Legislation and Evolution?

As to the question of legislating against the teaching of evolution in our public schools, we have little to say. Perhaps it might be as well simply to use argument and persuasion and not to resort to legislation at all.

However, something is to be said on the other side. Since it has come about that so many evolutionists set up their theories in opposition to the Bible, and either re-

[2] *The Dogma of Evolution*, p. 85.

ject it altogether or such parts of it as do not agree with their *penchant,* and since a very large number of people who support our state schools believe the Bible to be God's inspired Word, it is fair to ask whether these believers have no legal and moral rights; whether they do not at least have the right to protest; also whether, if religion is not taught in our state universities, irreligion and liberalism shall have free scope. Some state legislatures have forbidden the Bible to be used in the public schools. No protest against this kind of legislation has come from Professor Conklin; yet he makes a most vigorous protest against any legislation which would rule the teaching of evolution out of the schools. Is his conduct consistent and equable?

It is pertinent to ask whether the evolutionists really want to impose their teaching, *nolens volens,* on the patrons of our public schools. If so, does that seem to be fair? Is it in accordance with the American principle of freedom and equality? Very few, if any, Christian people want to force their religious teaching upon unwilling persons; and if they did try to do so, it would be wrong and un-American. Why are not the evolutionists willing to be equally fair?

Who Makes Infidels of Young People?

In Dr. Conklin's brochure an attempt is made to shift the blame for the defections of young people from the Christian faith upon the shoulders of those who oppose evolution—that is, to represent the defenders of the Christian faith as the ones who make skeptics! This seems to be another case of Ahab's challenge to Elijah: "Art thou he that troubleth Israel?" It is a strange circular kind of argument—the most loyal defenders of the

Bible cause people to become infidels! The present writer has known a number of young people who have been turned into infidels or semi-infidels through the teaching of evolution in colleges and universities; he has yet to meet one who was turned from the evangelical faith by the thoroughgoing defense of the Bible and the Christian system of doctrine. On the other hand, he does not know an out-and-out evolutionist who does not either cast the whole Bible overboard or refuse to accept many parts of it in their clear, literal sense. Dr. Conklin's leaflet is itself *prima facie* proof that the evolutionist declines to make the Bible his standard of authority; that he aligns himself with the liberalists of the Kent, Fosdick, Shailer Mathews school, and jeers at the "ultra-orthodox."

If young people in colleges and universities give up their faith in the Bible on the basis of the "evidences" adduced in favor of evolution, it needs saying that they are very easily shifted from one position to another; that religiously they are as unstable as "a wave of the sea, driven by the wind and tossed." In the face of the fact that the foremost biologists of the day concede that the principle of biogenesis holds the field, we see no good reason why any one should abandon his biblical faith for the unproved hypothesis of evolution. It would be well to have the humility to take at least a position of suspended judgment.

Who Is Competent to Form a Judgment?

Listen again to our protagonist: "Few opponents of evolution at the present time have either the technical training or even the desire to weigh critically the evidences for or against its truth. Properly to appreciate these

evidences requires some first-hand knowledge of morphology, physiology, embryology, ecology, paleontology, and genetics." The same, he says, is true of biology. Therefore, let everybody else keep silent; only the few specialists and experts have a right to form and pronounce a judgment on the theory of evolution!

These assumptions demand attention and analysis. Is evolution growing into an esoteric cult? Has it become the monopoly of a favored few? If so, what is going to be its benefit to the masses of the people? Do the evolutionists mean to cry, "Hands off!" to all the rest of us, while they issue their fiats as to what we shall believe? Is there to be a new "hierarchy," whose high priests are the evolutionists? Must the people support our schools and school teachers, and yet keep silent as to what is being taught to their children? We do not believe that such assumptions are in harmony with the fundamental principles of our free Republic. They spell autocracy; they annul democracy. If this land is to continue to be a government of the people, by the people, and for the people, the people must preserve their right to pass judgment on the kind of teaching imparted in the schools they establish, support and govern.

If the champions of evolution deem it a hardship because they cannot be free to teach their theory, lest they hold back what they believe to be the truth, we would remind them that Christian people feel it to be no less a hardship that the Bible, which they hold to be so precious and all-important, cannot be frankly and freely taught in our schools. In view of the fact that Christian people are most earnest in their belief that the Bible is God's Book, and that it gives to man his only hope of both temporal and eternal welfare, we think that evolutionists and others ought to appreciate the sacrifice they make

when they refrain from insisting that the Christian religion shall be taught everywhere. But in this country they make that sacrifice. Ought not other people to be likewise magnanimous? Should any one inquire, "How, then, shall the truth be propagated?" we reply that the Christian people of our land ask the same question with regard to their faith, which they believe to be the truth. If we are going to live together in peace in this land of freedom, there must be mutual and equable restraint and sacrifice. After all, belief in evolution is not something that is essential to man's temporal, social, economic, ethical or eternal welfare. We have never known a person to be saved from sin by belief in evolution On the other hand, thousands have been saved from sin by faith in the Christ of the Bible.

Another point must not be omitted: If the adult opponents of evolution cannot understand it, cannot weigh the evidences pro and con, why do the evolutionists try to popularize it, to bring it to the comprehension of the common mind? Hendrik Van Loon's books and some of J. Arthur Thomson's are written for boys and girls in the grades and high schools, and Joseph McCabe has written *The A B C of Evolution,* which people of ordinary intelligence surely ought to be able to understand.

"The whole scientific world long since was convinced of the truth of evolution," is this writer's declaration. But that statement is certainly too sweeping. We believe that there are many honest and capable scientists to-day who have serious doubts about the truth of evolution. Anyway, there have been times before in the world's history when the vast majority of scientists were mistaken. Once, almost to a man, they accepted the Ptolemaic theory of the universe; but no scientist to-day accepts that view. Once the nebular hypothesis of Laplace was all the vogue;

to-day it is having a hard struggle for acceptance. The history of the world is strewn with the debris of discarded scientific theories.

Fixity and Pliancy of Type

Dr. Conklin refers to "our domestic animals and cultivated plants" as having undergone many changes, some of these changes amounting to "specific differences." Then he adds, "In short, evolution has occurred under domestication."

Is not that an over-statement? We doubt whether even "domestication" has ever produced a distinct type among either plants or animals. To specify, has any one ever succeeded in transforming a peach tree into an apple tree, a cow into a horse, or a dog into a sheep? Has any culturist ever been able to cross the border line even among distinct species? That there have been variations within the species no one will deny. What a blessing it has been to humanity that man is able to improve certain species of vegetables, fruits, grains, fowls and animals! That seems to have been the Creator's original design. Two outstanding facts in nature make for the welfare of mankind—stability of the type and variation within the type.

However, man must continue to "subdue" nature, to "dress" and "keep" her, as the Bible teaches.[3] If he does not, she will invariably revert to the original inferior type. Everybody is conversant with the fact of reversion in nature. If you neglect your farm or garden or orchard, what will happen to it in a short time? If the whole human family were destroyed to-day, in a hundred years the earth would be turned into a howling wilderness.

[3] Gen. i.28; ii.15.

Nature would not even hold its own, much less continue to progress. The fact that Mendel, Burbank, and Darwin were able to produce valuable modifications within the species does not prove nor connote that Nature herself, left to her own way, would do the same. Man can do many things with Nature that Nature of her own accord could never do. Man can build a house and make an automobile; Nature never could do that. God made Nature stable in some ways and pliant in others. No doubt He did this to secure man's well-being.

We cannot admit that anti-evolutionists "concede evolution in rocks, plants, and probably animals, but draw the line at the evolution of man," as Dr. Conklin alleges. No; our objections are much more far-reaching and fundamental than that. We do not believe that matter and force were evolved; nor that living matter was evolved from dead matter; nor that animals were evolved from vegetables; nor that one distinct species has ever been evolved from another by means of natural forces; nor that the non-sentient can evolve into the sentient, the non-personal into the personal, the non-moral into the moral. Something cannot evolve out of nothing. *Ex nihilo nihil fit.*

Again we quote from Professor Conklin: "Apparently the anti-evolutionist demands to see a monkey or an ass transformed into a man, though he must be familiar enough with the reverse process."

The poor attempt at a joke may pass. However, if men do sometimes act as unbecomingly as the animals named, it is a case of reversion, which is the very opposite of evolution. It would be much more to the point if we could sometimes see the monkey and the ass actually advancing toward the human type.

The Genealogical Tree of the Transformists

Again we quote:

> Such evolution may be graphically represented by a tree on which the leaves and terminal branches represent existing individuals and species, while the larger branches and trunks represent ancestral forms; one leaf is not derived from another, nor one terminal branch from another, but these are derived from some lower-lying branches. In short, there has been evolution in divergent lines. The human branch diverged from the anthropoid branch, not less than two million years ago, and since that time man has been evolving in the direction represented by existing human races, while the apes have been evolving in the direction represented by existing anthropoids. During all this time, men and apes have been growing more unlike, and, conversely, the farther back we go, the more we should find them converging until they meet in a common stock, which should be, in general, intermediate between these two stocks.

Here we see man's pedigree graphically set forth in arboreal imagery! Does it seem to be plausible and probable? Let us scrutinize it. First, has any one ever seen a real tree like the one here depicted—one that bore such a diversity of fruits on a common trunk? No one has ever even seen a tree that bore pokeberries on one branch and peaches on another. There are humanly cultivated and budded trees that may bear inferior and superior fruit of the same species on different branches, but no one has ever seen even such a tree in the purely natural

sphere in the absence of man's intervention. Therefore, Dr. Conklin's genealogical tree is constructed purely out of his imagination, and corresponds to no known facts in the realm of natural history.

Second, Dr. Conklin gives his theory ample time: "The human branch diverged from the anthropoid branch not less than two million years ago." Is that science or conjecture? A scientist ought to be very sure of his premises, to make a statement like that. To tell just what took place two million years ago would require indubitable proof—proof so clear, indeed, that no one could gainsay it. We know scores and scores of theologians either personally or by repute; we do not know a single one who would risk his good name for sagacity or modesty by asserting what took place "not less than two million years ago."

In the third place, we would inquire what caused the human branch to diverge from the anthropoid branch? Why did not the other branches start along the human line, too?

Again, could one branch of the common trunk have produced a different type unless something new was injected into the "germ-plasm"? Can fruit of a higher variety be produced from a common trunk without budding or grafting through human intelligence and purpose? If a new germ-cell was injected from without by the Almighty, that would have been creation, not evolution.

Note again that "since that time . . . the apes have been evolving in the direction represented by existing anthropoids." One would surely think that, if the apes have been evolving for "not less than two million years," they would have evolved into something a little beyond their present status. Is there any evidence of their making any improvement at all to-day? Historians and

archæologists tell us that the present-day monkeys and apes are precisely like those of ancient Egypt and Babylonia, from three thousand to five thousand years ago; that they have made not one iota of progress. They can be taught some things by men, as can many other animals, but in their natural condition there is no evidence of advancement in intelligence, or otherwise. Thus, as far as empirical evidence goes, evolution cannot be proved; scientists beg the question by asking for two million years, to which period no human observer can go back.

Past and Present Status of Apes and Monkeys

At this point, some paragraphs from a well-informed writer will be relevant:

> The word evolution is generally used as though it were synonymous with development. No one, so far as my knowledge goes, denies that there has been development within almost every species of animals. But many do not believe in the Darwinian hypothesis of evolution, viz., that one species of animals develops into another species higher up, as, for example, the ape, or monkey, into man. They claim that the intervening links of development necessary to prove such an evolution, or transformation, have never been found, nor will ever be found.
>
> It is exceedingly strange how some people cling to the ape, or monkey, as an ancestor, considering the history of the ape. The oldest remains of the ape or monkey tribes, and their remains are as old as those of man, indicate that the ape was the same being, so far back as these remains reach, as he is now. The brain capacity of his skull was just the

same as that of the ape of our day; his fore limbs were just about as long; his teeth, claws, jaws, hairy skin, ugly mug, and all were just about what we see in the apes of the present day His brain capacity has always been lower than that of the lowest specimen of man.

So far back in time as these remains of the apes take us, there has been no appreciable approach toward man. The ape seems to have been stabilized ages ago.

Intellectually the ape has been just as stabilized as he has been physically. He is no farther along than his remote ancestors were. They lived in the jungles and forests and ate nuts, berries, bugs, birds, rodents, etc. He has not, in all the thousands or millions of years that he has been on earth, been known to till a square rod of the earth's surface. He has never been known to plant, sow, cultivate, grind or bake corn, barley or wheat. He, like the wild beasts, depends wholly on what he can find, that mother earth has brought forth spontaneously, for his subsistence. He neither sows, reaps, nor gathers into barns. In times of plenty he fares well. In times of scarcity he starves or migrates. He has never invented an alphabet nor made a book.

And the ape defends himself to-day just as his most remote ancestors did. He fights with his claws and teeth. He may sometimes throw cocoanuts and stones, but he has never been known to make himself a war club, spear, stone hatchet, bow and arrow, much less a gun or a sword. He has never organized even the smallest system of government. He may run in gangs, but when two boss apes fight for the headship of the gang, they fight alone. The rest

stand around and look on and then follow the one who whipped. They know nothing of combination to gain results.

The ape lives to-day as the apes did when they first appeared on the surface of the earth where their remains are found. They have never been known to build themselves any sort of dwelling place. They have never learned to strike fire from the flint nor make a lucifer match. They have never made a plow nor harrow nor cradle. They are still sticking in the mud like their ancestors.

How different with man! Man in the far east, at least, four or five thousand years ago, built houses, cities and temples. He cultivated the soil and made bread. He had a literature and science. In Europe, where he appears to have lived in the early ages as a savage or semi-savage, he made himself war clubs, spears, bows and arrows, stone axes; later he built houses and schools, churches, cities and empires. Man has risen to sublime heights.

He has conquered the sea, the earth and the air. He has made them all his servants. What has the ape done? And if he has not done anything in six or ten thousand years, what hope is there that he will ever do anything? But scientists tell us that it is not any of the present apes that are the ancestors of man; that it was some more ancient and superior ape from which he sprang. What, then, is the matter with evolution? Has it ceased to work? If not, why has the ape ceased to evolve into man? If it has ceased to operate, then it is not an irresistible law of nature, and evolution of this kind fails.

I prefer to believe that man was created by Almighty God, Creator of the heavens and the earth

> and all things that in them are, and that this God breathed into man something of Himself which He did not give to the ape. If some prefer to believe that they are children of the ape, they have that privilege. I prefer to call myself a child of God.[4]

Not in a volume of theological essays, but in a scholarly scientific book, Mr. Horace Hutchinson holds that animals do not exhibit anything like human reason. He says:

> Nowhere do we see an animal with any cognizance of the future, laying a plan, choosing an end and adapting means. The stupidity of animals is really insagacity. [Then he adds that the ape] has for long periods been privileged to watch man making his fires, using his bows, his clubs, and so forth. The monkeys, we are told, will come down and warm themselves gratefully at the embers of the fire which man has left glowing in the forest. But not to a single one of them has it occurred to place another branch from those lying around them, on the dying fire, though some of them must have seen this done by man a score of times.

If evolution is the dominant law in nature, why does it not show its hand in the case of the ape? The evolutionist will reply that it is absurd to expect this! Why is it absurd? If animals which were sub-apes long ages ago, when they had no human examples and instructors to aid them, could evolve into human beings, why cannot the modern apes, who have the aid of human environments, develop into human beings?

[4] This article appeared in the New York *Sun*.

Dr. Conklin declares that man "comes from ape-like or monkey-like forms. . . . On the other hand, the resemblances between monkeys, apes, and men are due to the persistent inheritance of certain common traits which they have derived from a common ancestor, just as the resemblances of cousins are due to the inheritance of traits from common grandparents."

But this is only an *ipse dixit*. Evolution is one inference that may be drawn from the premises; but it may be a *non sequitur*. At any rate, it is that form of logical fallacy which we call "begging the question," or taking for granted the very thing to be proved. Is there not some other way of accounting for the resemblances between men and animals? Does not the doctrine of special creations, as set forth in the biblical narrative, furnish an adequate and rational explanation of these parallelisms? If God formed man to be a part of the natural cosmos, and to live and function in the midst of a natural environment, would He not have made him to fit therein? How could this have been done except by making him in many respects like the natural realm about him? Even the so-called "recapitulatory theory," if it were proved, might be explained on that basis, because it would indicate that man was created to have an organic relation to the natural cosmos, which was to be his home and over which he was to exercise dominion.

A recent author tries to account for man's trait of curiosity by saying he inherited it from his "brute ancestry." Is it not more rational to believe that God originally created man with that predilection, which is the source of his desire to increase in knowledge and power? Is not that a higher and nobler origin for such an excellent psychological trait?

Romanes is quoted by Dr. Conklin as saying that, if we reject the evolutionary theory, "we can only suppose that the Deity in creating man took the most scrupulous pains to make him in the image of the beasts." [5] While that seems to be said in scorn, yet the truth in it is that, in the matter of physical structure and natural instinct, God did make man very much like the natural creatures around him. Had man been totally unlike the soil, the vegetables and the animals, he could not have subsisted in the midst of his natural context. Therefore, these many striking resemblances between man and other creatures constitute the most cogent argument for the divine creation of all things. This view assigns an adequate cause for the cosmos and an adequate purpose in its creation and peculiar constitution. But if in man's lower nature he bears a similarity to the physical realm, in his higher nature, his psychical being, he bears the image of his Maker. Thus he is vitally connected with both the natural and the supernatural realms. Is not that a rational doctrine? It differs widely from the teaching of Van Loon, who says in one of his books, "We do not know how or why or when the human race began its career on earth." The Christian doctrine is certainly the more salutary and uplifting.

Is the Recapitulation Theory a Valid Proof?

In regard to the "recapitulation theory," Professor Conklin says that "in it we see evolution repeated before

[5] Romanes was once an atheist, and wrote a book against the theistic world-view. Later he was converted to Christianity, and recalled his errors, presenting strong arguments for the divine existence and the Christian system. Dr. Conklin's quotation must, therefore, be taken from his early infidel work and is consequently both antiquated and worthless. It is inconceivable that a Christian man would write such a sentence as is here ascribed to Romanes.

our eyes." But that, too, may be a *non sequitur*. The doctrine of creation may also explain that phenomenon, for that may be the Deity's way of connecting man vitally and organically with his natural environment. However, our evolutionist is honest enough to say that "development from the human embryo repeats some of the main stages of evolution." Note the qualifying words "some" and "main." But he adds, "The fact that certain embryonic structures do not repeat the evolutionary history does not destroy this general principle of embryonic recapitulation."

We would ask, Why not? Here again the scientist must supply the "missing links" by the use of his imagination. He must make his inference broader than his facts. This is another logical fallacy. Perhaps our evolutionist has not read Drs. Colgrave and Short's recent book, in which these learned laymen and scientists (not preachers or theologians) have this to say of the recapitulation theory:

> Nor will any one who has any acquaintance with the facts of human and animal embryology be disposed to accept without a great deal of qualification the old evolutionary theory that every man in his development climbs up his own genealogical tree. [Then they quote Professor Kellogg as follows] "The recapitulation theory of Fritz Mueller and Haeckel is chiefly conspicuous now as a skeleton on which to hang innumerable exceptions. . . . The recapitulation theory is mostly wrong." [6]

Thus, according to the testimony of some scientists themselves, this theory is far from proving evolution.

[6] *The Historic Faith in the Light of To-day*, p. 15.

Man's Humble Conception and Birth

The opponents of evolution should give serious attention to what Dr. Conklin next says; they should not ignore it, nor try to laugh it out of court. His argument is this: If we feel repelled by the doctrine of an animal ancestry for man, why do we not object to the fact that the individual man is developed from an "egg" in his mother's womb? That surely, he seems to think, is as lowly an origin for the individual as a pre-simian origin would be for the human race.

Our reply is, first, the individual's germinal origin is a fact of common and universal observation, and therefore no one would presume to deny it. The Christian believer therefore knows that such origin and development are the divine order, and so he feels no humiliation or repugnance in view of the fact. But the proof of man's animal origin is not forthcoming; it is not a matter of common or of scientific observation; it belongs to the realm of hypothesis; therefore the Christian man feels no need of accepting a repellent theory that lacks validation and proof.

Second, every Christian believer knows that the spermatized ovum in the seminal depths of the human mother is a human germ, not a vegetable, mollusk, frog or baboon germ. He knows, too, that if properly nurtured by human blood and human love and care, it will develop into a conscious, rational personality, not into an animal. The microscope may not be able to distinguish between the nuclear human embryo and the animal embryo, but in quality and possibility there is an unbridgeable gulf between them. Therefore, there is something essentially and intrinsically noble about the nucleus from which a human being grows. Thus Dr. Conklin's

scorn of evangelical believers on this ground is gratuitous and irrelevant.

Man's Body Formed from Clean Soil

Referring to the biblical narrative of Adam's formation from the dust of the ground, our evolutionist inquires: "Is it any more degrading to hold that man was made through a long line of animal ancestry than to believe that he was made directly from the dust? Surely the horse and the dog and the monkey belong to higher orders of existence than do the clod and the stone." Then he quotes Sir Charles Lyell as saying: "It is either mud or monkey." Dr. Conklin even goes so far as to say on a previous page: "The idea that the Eternal God took mud or dust and molded it with hands or tools into a human form is not only irreverent; it is ridiculous." He thinks it much more reasonable to believe that "God made the first man as he made the last," etc.

In reply we would say: First, there is abundant empirical proof, as we have already shown, that man's body is composed of precisely the same chemical constituents as the soil. Chemical analysis has proved that to be a fact. Therefore, when the Bible teaches that man's physical organism was framed from the finest material of the ground, it is in agreement with what we know to-day scientifically about its composition. Thus there is nothing irreverent or ridiculous about the biblical narrative; rather, instead of running off into absurd mythology, it walks with its feet on the earth in the sphere of solid fact. Christian believers, therefore, feel no repugnance toward such truths as are established by

empirical observation. They do feel repelled, however, by the thought that the germ-plasm from which they were derived was at one time, however remote, a bestial germ-plasm instead of a human one.

Again, no Christian theologian—no, nor the most humble and unlettered Christian believer—thinks for a moment that "the Eternal God took mud" from which to make man. That is an *argumentum ad hominem*. The Bible does not say "mud." It says "dust." And Dr. Keil, the scholarly Old Testament exegete, explains that the Hebrew word for "dust" (*aphar*) means "the finest material of the soil" of the Garden of Eden. Therefore, it was clean soil. God had made it pure and beautiful, and pronounced it, with the rest of the cosmos, "very good." [7] That is the evangelical view, and there is nothing revolting about it, as there is about the theory that man came up from filthy and ferocious beasts as they now exist, and as evolutionists teach they have always existed. As has been shown in a previous chapter, biblical Christians do not believe that the pristine world, as God made it, was in its present fallen condition; that was caused by the despoliation of sin. Hence man's origin, both of soul and body, is, according to the Christian view, dignified, pure and holy.

An unwarranted piece of derision is the fling that God molded man "with hands or tools." No Christian has ever been so crude as to think that or say it. The suggestion itself indicates a sad lack of knowledge of the teaching of theology. Christians are not so presumptuous as to attempt to describe the process by which God framed man's body. We have read many works on Christian theology, ancient, medieval and modern, and

[7] Gen. i.31.

have never read anything so sacrilegious as that in any of them. The Bible does not tell us anywhere how it was done, any more than it tells us how God created the primordial material, or made the first germs of life, or created the soul of the first man. The simple dignity and order of the Genesiacal narrative would lead us to believe that He always wrought in a way that was worthy of His majesty and holiness.

Referring to the biblical account of the framing of man's body, Professor Conklin calls it "a process," and thinks that "the opponents of evolution ought to be able to conceive of a dignified and divine way in which the Creator fashioned man." We reply, If the Creator fashioned man in the direct way set forth in the Bible, that was both "dignified and divine," for then God made him good and noble from the start; but if God first made him a filthy beast, swirling a long tail, his whole body covered with long hair, and climbing about in the trees of a jungle, engaged in fierce contests with other animals, it is hard to see how it could properly be styled "a dignified and divine way." Moreover, while we are willing to grant that the Bible describes the act as a process, it would not be a fair and natural interpretation of the language to read into it the age-long process of evolution. Let us treat the Bible honestly.

In other chapters of this book we have dealt with the data of the fossil remains of man, Neanderthal, Trinil, Cro-Magnon, etc., and would also cite Colgrave and Short's treatise referred to above.[8] Our author demands scientific evidence of the doctrine of special creations. In reply we refer him to Chapter IV of this volume.

[8] *The Historic Faith in the Light of To-day*, pp. 49, 50, 52.

Christianity and the "Religion of Evolution."

More recently Dr. Conklin published an authoritative article [9] dealing with the subject of evolution and religion. Some evolutionists would deny positively that evolution is a religion, but Dr. Conklin seems to make it the very basis of religion, for he says: "The Religion of evolution deals with this world rather than the next. It prays, 'Thy kingdom come, thy will be done on earth.' It seeks to build here and now 'the City of God.' "

Here the claim is made that evolution is to give the world a religion, and that it is competent to say just what kind of a religion it should have. But the religion here described by our evolutionist is not the Christian religion, but is un-biblical and anti-biblical, one of its foremost champions himself being on the witness stand. The Christian religion is broader and better than the evolutionary brand, because it instructs mankind regarding both this world and the next. It is not confined to this brief span of our earthly existence, nor to this little planet on which we now live. Our Lord told us how to live well here, and do our part; but He also opened up the gateway of futurity to our vision, saying: "Let not your heart be troubled; believe in God and believe in me: In my Father's house are many abiding places; if it were not so, I would have told you. I go to prepare a place for you." Says the apostle Paul: "Christ hath brought life and immortality to light through the gospel." To show the breadth and all-sidedness of the Christian religion over against the narrower character of Dr. Conklin's religion of evolution, we cite Paul again:

[9] Published in the New York *World*.

"Godliness is profitable unto all things, having promise of the life that now is and of that which is to come." The Christian religion is both terrestrial and celestial. It is not narrow. To declare, therefore, that evolution and Christianity are in accord, and then tone down Christianity to force it into consonance with evolution, is neither good logic nor good religion.

CHAPTER IX

PERTINENT POINTS ON EVOLUTION

Some Fatal Admissions of the Evolutionists

A recent book entitled *The Evolution of the Earth and Its Inhabitants,* by five professors of Yale University, contains some fatal admissions on the part of advocates of the evolutionary theory. These men are courteous, non-controversial, frank and honest, and are among the best exponents of the evolution theory. If all evolutionists displayed their fine spirit, the question could be argued in the courts of science, reason and religion with no personal ill-will to obscure the issue.

One of the most enlightening chapters of the book is the one on "The Origin of Life" by Professor Lorande Loss Woodruff. He admits frankly that spontaneous generation is still unproved, and that the law of biogenesis now holds the field among scientists.[1] Note the following: "The theory which has gained content and impetus as the years have rolled, is that matter does not assume the living state, at the present time at least, except under the influence of pre-existing living matter." [2] Again: "We thus reach the general conclusion that, so far as human observation and experimentation go, no form of life arises to-day except from pre-existing life." [3] Further on he quotes from Dr. E. B. Wilson, whom he calls "the

[1] The *Evolution of the Earth and Its Inhabitants,* pp. 89 ff.
[2] *Ibid.,* p. 91.
[3] *Ibid.,* p. 93.

dean of American biologists," to this effect: "The study of the cell has, on the whole, seemed to widen rather than to narrow the enormous gap that separates even the lowest forms of life from the inorganic world." [4] This quotation is from Dr. Wilson's book, *The Cell in Its Development and Inheritance.*

Professor Woodruff canvasses eight different modern theories of the origin of life, *e.g.*, Vitalism, the Cosmozoa theory, Pfluegler's theory, Moore's theory, etc., and finds all of them inadequate. After a scientific analysis of these hypotheses, he comes to the conclusion that "biologists are at the present time absolutely unable, and probably will be for all time unable, to obtain empirical evidence on any of the crucial questions relating to the origin of life on the earth." [5]

Dr. E. B. Wilson is also the author of a book entitled *The Physical Basis of Life.* It is a profoundly scientific dissertation. With all the author's desire and effort to establish evolution, however, the upshot of his whole discussion is that, at least for the present, the connecting link between the inorganic and organic kingdoms has not been found; life is as profound a mystery as ever, and, as far as empirical observation goes, the law of biogenesis still holds the field. Abiogenesis is only a big name, and does not stand for a fact. The chasm between the living and the non-living still remains unbridged.

The regrettable fact about this book is, that so frank and competent a scientist nowhere makes the slightest suggestion that God, or some kind of an intelligence, might in some way be connected with the wonderful composition and processes of the living cell. In spite of the author's silence on this point, we felt conscious more

[4] *Ibid.*, p. 94. [5] *Ibid.*, p. 107.

than once, as we perused his instructive study, of the presence of the Supreme Being.

One of the most enlightening of recent books is by Vernon Kellogg. While he holds firmly to the doctrine of evolution, he makes so many concessions in regard to its failures that he must constantly resort to dogmatic assertion in lieu of proof in order to bolster up the theory. However, we shall here confine our attention to what he says regarding the origin of life. After speaking of various attempts to produce life artificially and a number of conjectures that have been offered, he says:

> But, nobody has yet made an amœba in a test tube, nor infusoria in a sterilized hay infusion. Pasteur and Tyndall long ago exploded the naïve claims of the believers in spontaneous generation. *Omne vivum ex vivo*. It is only life that produces life. The amœba-like bit of oil foam, with all of its realistic imitation of amœba's movements, the most complex molecules created by the organic chemist, with all their identity of chemical elements with protoplasm, are all of that long way from amœba and protoplasm which is measured and defined by the phrases, non-life and life. There is a great gulf between what is living and what is not. And that gulf creates the great question for evolutionists and non-evolutionists alike: the question of the origin of life.[6]

To our mind, these concessions are fatal to the theory of evolution; for if it fails at the most crucial point, namely, the origin of life, it admits itself inadequate by that very fact. Moreover, since the sponsors of evolution

[6] *Evolution*, pp. 110, 111.

admit that life has never been proved to have been evolved from non-living matter, why are they not just as frank to admit that they have no more definite and positive proof of the transmutation of species? We hold that the law of fixity of type in organisms is just as obvious as is the law of biogenesis. To put it in another way for the sake of emphasis, transformation of species is just as far from being demonstrated as is spontaneous generation. Thus at the very points where evolution should prove itself strong, it utterly collapses. On the other hand, at those very crucial points the doctrine of special creations proves itself entirely adequate and peculiarly convincing.

Reference has already been made to Dr. William Bateson's honest admissions in his Toronto address. It created much discussion, and some anti-evolutionists, who took advantage of its frank admissions, were accused of perversion and misrepresentation because they depended on the mere hearing of what Dr. Bateson said, or on press reports of the address. But now we have his views in black and white, printed in *Science,* so there is no chance for garbling or misstating. Let us note what an honest and competent scientist has to say. Speaking of the assurance with which evolution was advocated some years ago in the heyday of Darwinism, Dr. Bateson observes:

> So we went on talking about evolution. That is barely forty years ago; to-day we feel silence to be the safer course. [Again] Discussion of evolution came to an end because it was obvious that no progress was being made. [Further on he says] When students of other sciences ask us what is now currently believed about the origin of species, we have no clear answer to give. . . . Where precisely

has the difficulty arisen? Though the reasons for our reticence are many, and present themselves in many forms, they are one in essence; that, as we have come to know more of living things and their properties, we have become more and more impressed with the inapplicability of the evidence to these questions of origin. There is no apparatus which can be brought to bear on them which promises any immediate solution.

Later on he speaks of the boastful claims of a former day:

> What glorious assumption went without rebuke! Regardless of the obvious consideration that "modification by descent" must be a chemical process, and that, of the principles governing chemistry, science has neither hint nor surmise, nor even an empirical observation of its workings, professed men of science offered very confidently positive opinions on these nebulous topics, which would now scarcely pass muster in a newspaper or a sermon. It is a wholesome sign of return to sense that these debates have been suspended. . . . Biological science has returned to its rightful place—investigation of the structure and properties of the concrete and visible world. But that particular and essential bit of the theory of evolution which is concerned with the origin and nature of species remains utterly mysterious.

To this we reply: That "particular and essential bit of the theory of evolution which is concerned with the origin and nature of species" is the crux of the whole contention.

We hold, therefore, that Dr. Bateson virtually capitulates to the opponents of evolution.

Thus the verdict in the court of science itself regarding evolution is, "Not proven." Dr. Bateson concedes that it has not been validated in respect to the origin of species, and Professor Woodruff, Vernon Kellogg and Dr. E. B. Wilson make the same admission regarding the genesis of life. These admissions were not forced from these capable scientists—they were voluntarily offered to the public; nor were they printed in religious books and periodicals, but in those of a purely scientific character. The honesty of these eminent men impelled them to be frank. It is true, Dr. Bateson, instead of giving up evolution, says it must be accepted "by faith." But a scientific theory cannot be proven in that way.

An illuminating article appeared recently in *The New Republic* from the pen of Professor John M. Brewer of Harvard University. He quotes from a book by G. H. Howison, entitled *The Limits of Evolution*, published some years ago. Professor Brewer thinks that this book is the clearest and most scholarly essay ever published on the philosophical aspects of the evolutionary hypothesis. Howison was an advocate of evolution, but we fear he was neither a good philosopher nor a lucid reasoner. Moreover, his admissions, as we shall see, are fatal to his theory.

In his opening paragraph he declares that the theory of evolution has practically become dominant, has been incorporated in the thought of the age. Its devotees hold, he avers, that man's mind is the outcome of the evolutionary process. Note how he puts it: The mind is "a result of development from what is not mind." But how could the non-mental evolve into the mental? Can something come out of nothing? Further on, our author

says that the evolutionists look upon the human mind's "highest attributes—its ideality, its sense of duty, its religion—as tracing their origin back to the unideal, the conscienceless, the unreligious, and as thus in some sense depending for their being on what has been well termed 'the physical basis of life.'"

This certainly is strange philosophy—that the conscience could evolve from "the conscienceless," the ideal from the "unideal," the religious from the "unreligious." That view is tantamount to saying that something can come from nothing.

On six crucial points Mr. Howison concedes the failure of evolution. They are as follows: (1) It cannot cross the chasm between the phenomenal and the noumenal; (2) it cannot bridge the gulf between the inorganic and the organic; (3) it cannot explain origins; (4) it cannot deal successfully with causation; (5) it cannot explain the human reason; (6) it cannot explain man's conscience.

We may well ask, then, what does it explain? Those six facts are the very facts that need to be explained. They are the crucial facts. That life comes from previous life every schoolboy knows. What we want to know is, how life originated. At every point where evolution ought to be strong, it proves itself inept and inadequate.

Darwin said: "In what manner the mental powers were first developed in the lowest organism is as hopeless an inquiry as how life itself originated." Spencer conceded that there is "no resemblance between a unit of feeling and unit of motion." Again note this from Darwin: "The eye to this day gives me a cold shudder." Why? Because Darwin saw that it could not be accounted for by his theory of development by means of "natural selection." Professor H. W. Conn, a well-known

American exponent of evolution, makes this frank but damaging admission concerning the origin of life: "Upon this subject, it must be confessed, we are in as deep ignorance as ever. Indeed, if anything, the disclosures of the modern microscope have placed the evolution of this problem even farther from our grasp."

Mr. Huxley long ago showed that the doctrine of the struggle for existence and the survival of the fittest does not hold good in the moral life of man. Let us quote from this scientist:

> The ethical process is in opposition to the principle of the cosmic process, and tends to the suppression of the qualities best fitted for success in that struggle. [Again] The practice of that which is ethically best . . . involves a course of conduct which in all respects is opposed to that which leads to success in the cosmic struggle for existence. In place of ruthless self-assertion, it demands self-restraint; in the place of thrusting aside, or treading down, all competitors, it requires that the individual shall not merely respect, but shall help, his fellows; its influence is directed not so much to the survival of the fittest as to the fitting of as many as possible to survive. It repudiates the gladiatorial theory of existence. . . . Laws and moral precepts are directed to the end of curbing the cosmic process and reminding the individual of his duty to the community, to the protection and influence of which he owes, if not existence itself, at least the life of something better than the brutal savage. [In another place he says that] cosmic nature [is] no school of virtue, but the headquarters of the enemy of ethical nature.

Thus, according to Huxley, "the ethical process" (morality) is the complete reversal of "the cosmic process" (evolution). Yet the evolutionists continue to assert that man's moral nature and the practice of morality in society are the outcome of evolution up through nature from the protoplasm and the amœba. That means that "the ethical process" is the natural offspring of the "cosmic process." And that means that evolution has brought forth its direct opposite; also that it completely changes its method and program when it reaches morality in men. A wonder-worker is evolution! Here are some of the miracles it makes possible: ferocity begets gentleness, cruelty begets kindness, selfishness begets altruism, the non-moral and the immoral beget the moral, hatred begets love! Did ever a corrupt tree bring forth such excellent fruit?

But these things cannot be. They are contrary to the nature of things. They violate the fundamental principles of sound thinking.

What the Birds Teach about Evolution

Attention is here called to a fact that seems, in and of itself, to disprove the theory of evolution. The advocates of this hypothesis maintain that all forms of life have evolved progressively from a few simple primordial cells. Hence the first forms were simple vegetable forms, then came the insects, then the lowest animal forms, and so on up to the highest kinds of animals, until finally man appeared as the climax.

According to this program, therefore, the insects appeared and flourished myriads of years before the birds came into existence. Now, if nature was the same then as now, the insects would have destroyed all the vegeta-

tion long before the advent of the birds; for to-day birds are needed to preserve the vegetable world from the ravages of the insects. If all the birds were destroyed now, in only a few years there would not be a blade of grass in our fields nor a leaf on any of our orchards or woodlands. Hence, if, in the geological ages, the insects appeared æons before the birds, all the vegetation would have been destroyed, and the insects themselves would have perished for lack of food, and thus never could have evolved into the higher forms of animate life. This one fact seems to give the fatal blow to the theory of evolution.

However, according to the biblical cosmogony, everything can be most beautifully explained; for then the plants and insects did not appear long ages before the birds; moreover, the animal world was not then at war; there was no "struggle for existence"; all nature was "good." Nature's lapse occurred only after the fall of man, her head and crown, as has been previously shown.

A labored attempt to bolster up the evolution theory is made by Dr. J. Arthur Thomson in his book entitled *The Biology of Birds*. If the author would stay by facts and avoid speculations, his work would be of much value. But he mars his presentation by constantly trying to show that the birds have evolved from the reptiles. While he is compelled to admit that the bird's feathers are a sphinx's riddle to the evolutionist, he surmises that they may have been evolved from reptilian scales, and then proceeds from that assumption as if it were proved. Surely such conclusions are far-fetched.

Just one simple question will quash the theory: "Why do not reptiles to-day exhibit any tendency to develop wings and feathers?" If they do not do so in the present advanced state of the world, it is not probable that they

ever did. To say that they would do this if they had time enough, is both guessing, and begging the question. The Christian believes that the avian kingdom affords clear and striking evidence of design, and therefore of a divine Creator; but in Professor Thomson's book not the slightest intimation of the existence of a divine Being is to be found in any of its four hundred and thirty-six pages. In one of the present writer's books he has not thus bowed God out of the natural world, but has shown clearly that the feet and wings of our feathered neighbors afford abundant evidence of teleology; and teleology in nature demands a personal God.[7]

Whence Came the Vital Germ?

Some of the advocates of evolution are fond of quoting in support of their theory, the saying of Christ, "First the blade, then the ear, then the full grain in the ear." They also point to Christ's parables about the mustard seed and the leaven. Do not these comparisons proclaim growth, progress, evolution?

Our reply is: No one denies the fact of life and growth in both nature and religion. It should be remembered, however, that life and growth come only after the germ of life has been created, and never in any other way, as far as we know. The question is not, Will a grain of corn grow after it has been formed? but, Whence came the first grain? The mustard seed will also germinate and grow, given the right conditions; but whence came the *first* mustard seed? So the leaven-germ will ferment and expand; but the germ must exist before the leavening process can take place. Will the champions of evolution maintain that the leaven, the

[7] *Our Bird Comrades* (3d ed.), pp. 180-197.

corn grain and the mustard seed came into existence, each with its peculiar germ-plasm, by evolution? Will they say that the one evolved from the other? Will they hold that leaven evolved from non-leaven and living germs from non-living matter? They know full well that such exploits have never been witnessed in nature.

A recent proclaimer of evolution observes that we never see men and women made outright nowadays; they always come from impregnated cells and by a gradual process, are born babies, and then develop gradually into adults. That is true; but the inference drawn from the fact is wrong. No one has ever known a human baby to be born except from the conjunction of two adult human beings of opposite sexes. Given the parents, a child may result; but there can be no baby without parents. Now, which came first, the baby or the parents? If the baby was made first, who would have taken care of it until it was able to care for itself? But one baby would not have been enough; two of opposite sexes would have had to be made. Then who would have taken care of them until they grew to years of puberty? Or if you desire to go back still further, how could the pregnant germs of a human being have been produced and developed into a human child without the sexual conjunction of two adult persons of opposite sexes?

But now let us suppose, for the sake of the argument, that God originally created two human beings, a man and a woman, just as the Bible narrates; would not all the necessary conditions have been fulfilled for their own preservation and the procreation of the race? That, surely, would have been a good and adequate start, whatever else may be said about it. The same law holds throughout the organic world; there must always be a fully developed or mature organ before reproduction can

take place. It is the law of the cell that it will not divide itself, and thus increase life, until it is fully matured. Then how came the first living cell?

Some More Salient Points

Several recent investigators describe for us the remains of many ancient extinct animals found in various parts of the world—Nebraska, Utah, California, and the Gobi desert of Mongolia in China. In the last named country have been found the eggs of one species of the dinosaur family. A recent scientific lecturer showed, by means of moving pictures, the fossil remains of many gigantic animals lately discovered among the mountains of Utah. He also represented some of them as they have been "reconstructed" and set up in scientific museums. In some cases only the skeletons were shown; in others the animals appeared in full form as the scientists have rehabilitated them. All these discoveries are interpreted to spell evolution.

But, while we would not for a moment dispute any of the facts depicted, the argument for evolution is far from persuasive. And why? Because all those ancient animals were fully developed, had all the organs needed for functioning, and as far as can be discerned from the representations of the scientists themselves, they were just as complete and complex in their organization as are the animals living to-day. The great dinosaur was as complex in structure as are the reptiles of the present time. In fact, no existing lizards are as large as he was, while some other extinct species of the lizard family were still larger than he. Then how can evolution be proved from these ancient remains? Indeed, they furnish strong evidence against the theory.

Professor J. Howard McGregor, of Columbia University, recently paid a visit to Dr. Eugene Dubois, the famous discoverer of the so-called Trinil Man in Java many years ago. Heretofore Dr. Dubois had kept the remains under lock and key. But Professor McGregor was permitted to see them and give them "a prolonged examination." But Dubois and McGregor differ in interpreting the remains. Dr. Dubois believes that their owner was nearer to ape than to man; Professor McGregor holds the contrary view. Are the remains of the skull of this creature so meager that these scientists cannot agree whether it was nearer to the ape or to man? The maximum capacity of the brain of the modern ape is six hundred cubic centimeters; the minimum human brain capacity known to-day is nine hundred cubic centimeters. But McGregor holds that the cranial capacity of the Trinil Man was nine hundred and fifty cubic centimeters. If this is true, why cannot Dr. Dubois see that the creature was nearer to man than to the ape? And if Professor McGregor is correct in his estimate, the Trinil Man had a larger brain than some human beings possess to-day. Then how could the Trinil Man have been a "missing link" between man and the ape? Why is the Trinil Man called an "ape man" if he had a larger brain than some modern human beings possess?

A recent statement by Dr. Osborn is enlightening. It bears on the subject of brains. He says:

> Our own Nordic race dates back some fifteen hundred years. . . . Preceding our own race by ten to twenty thousand years, was that of the art-loving Cro-Magnons, inhabitants of western Europe after the glaciers disappeared. The intelligence, the artistic and spiritual qualities of the Cro-Magnon race

> are most surprising. With a body like our own and a brain as large as ours, if not larger, they were in every sense intelligent. Superior individuals of this race would have been capable of taking their places as senior wranglers in any of our modern universities, and may have had an excellent philosophy of life.

If those ancient peoples, living from twenty-five thousand to thirty-five thousand years ago, "had as large brains as men have to-day, or perhaps larger," what becomes of the theory of evolution? Why have not human brains grown in bulk within the last twenty-five centuries?

How to Define a Species

A recent writer has challenged the author of this work to define a species. He says that the biologist is not assured "of the reality of such an entity as a species," and does not "know exactly what it is. . . . The biologist conceives of a species as just a group of creatures enough alike to be treated together for certain purposes."

Here is another grave fault of the evolutionists: they merge everything together, see everything in a state of flux, and thus lose the sense of distinctions in nature. In their anxiety to prove that species become transmuted into one another, they fail to see the specific differences that nature herself has definitely established. This theory, by which the natural world is interpreted, also runs up into the higher spheres of thought and experience, so that the evolutionist is apt to blur the distinction between life and non-life, mind and matter, instinct and intelligence, good and evil, God and the world. It is no wonder so many evolutionists can see only an "inscrutable

power" in the universe. Besides, if everything is in a state of flux, and all things are constantly merging into one another, there is nothing stable in the world, and that makes science itself and scientific classification impossible. It is the *differentia* in things that makes it possible for scientists to classify data. And those differences must be fixed and orderly, too, or there can be no science.

Now how shall we define a species? A species is a class of organisms that reproduce true to form and do not cross with other types. There may be some exceptional and obscure cases in which it is difficult to decide whether the differentiation is one of species or only of variety, but in the vast majority of cases the differences are clearly marked. In the vegetable world wheat begets wheat, not oats or rye; apples reproduce apples, not peaches or apricots or oranges. In the bird world cardinals always mate with cardinals, bluebirds with bluebirds, flickers with flickers, robins with robins. In the animal world cows breed with cows, horses with horses, cats with cats, dogs with dogs, lions with lions. None of these distinct species interbreed. Hence it is clear that our questioner is in error when he thinks that we cannot distinguish among species.

Even where species are very much alike they do not transgress the fixed boundary lines of their own type. To cite concrete examples, there are the downy and the hairy woodpeckers; they look very much alike, and are much alike in color, form, and habits, the only difference being that one is somewhat larger than the other; but in spite of the close similarity, they never mix up their family affairs. The whippoorwill and the nighthawk, both belonging to the goatsucker family, can scarcely be distinguished as to color and form except by an expert bird student; yet they never cross. Some species of the

wood-warblers bear a close resemblance to one another, and are often the despair of those who study birds with a glass; but they are extremely virtuous little bodies, so that not one of them ever resorts to wife-stealing outside of its own family. The Magnolia and Blackburnian warblers are just as distinct to-day as they were fifty years ago when the writer began his avi-faunal studies.

Most interesting and most beneficial to man is this natural law of fixity of type (nowadays called "fixism"). If it were not for her stability, man could not depend upon nature; she would be utterly unreliable. The farmer would not know whether his flock of sheep would remain sheep or not, or whether his herd of cattle would continue to be cattle. He might sow wheat in the fall, and never know until the next summer whether his harvest would consist of wheat or rye.

On the other hand, how providential is the fact that, within many species, there is enough plasticity for the breeding of varieties! Thus species may be greatly improved by human skill and patience. And if man keeps his hand on the cultured varieties, he can preserve them for many years and generations. When he has "dressed" his Eden, he must "keep" it, just as the first man was commanded to dress and keep the original Eden.

The facts, therefore, warrant us in saying that, wherever a class breeds true to form and keeps within its own specific range, there exists a distinctly marked species, so intended by Providence; but wherever there is the possibility of crossing, there exists a variety, also divinely arranged for man's benefit, in giving him a chance to produce useful cultural forms. The ass and the horse will cross, and the product is the non-fertile mule, which is a most useful animal. If the mule were a breeding animal, its usefulness would be greatly diminished. This

seems to be a providential arrangement. The same is true of our many cultured varieties of grain, fruit, fowls and animals, each of which has doubtless been developed by man from an inferior stock.

The writer who has challenged the author to define a species declares that "the significance of Darwin lies precisely in the denial of the whole notion of immutable species of beings which procreate each 'after its kind.' "

If that is true, why do earthworms always reproduce their own kind? Why do oysters give birth only to oysters and never to lobsters? There are some species of sea-weeds and animalculæ which existed far back in the geological ages, whose progeny to-day is precisely the same in kind as that of their remote forebears. Does not that point to the fact that there are "immutable" types?

This same writer says that groups never reproduce exactly "after their kind." He refers to individual variations. But he overlooks the fact that, while individuals differ in certain ways, there are always specific and general resemblances which clearly indicate the group to which they belong. Certainly no one mistakes a cow for a horse or a crow for a humming bird. The ornithologist has no difficulty in distinguishing the cowbird from the red-winged blackbird. He would soon betray his lack of training in field-work were he to mistake the redstart for the chestnut-sided warbler. Scientists should see nature as she is, instead of through the colored glasses of speculation.

That individuals of the same species differ somewhat is self-evident. This is also a providential arrangement. If all horses looked precisely alike, the farmer would not know which horse to hitch to the plow and which to the carriage. No; the realm of nature is not in a constantly

merging state, flowing along without useful and necessary distinctions. It has just enough of both stability and pliancy to prove that God made it to be a comfortable abode for man.

One cannot help feeling grateful that a good Providence has established such an economy of rationally balanced fixism and plasticity in the organic realm. Were everything in a state of flux, not only would science be impossible, but it is doubtful whether human life itself would be tolerable. What a welter this world would be if animals were constantly emerging into the human status! Even the evolutionist would be dismayed, we fancy, were he to go out into the forest and find some creatures one-fourth human, others one-half human, others three-fourths human, and so on, with all the intermediate grades. And what would civilized nations do with all the millions of morons, imbeciles and semi-imbeciles? Could we leave them in the forests and jungles to perish miserably? Would we not owe them humanitarian care? And how difficult it would be to tell just when they had rational souls?

Suppose we were to bring them into our civilized communities; we would indeed have many perplexing problems on our hands. Should we place our partially human protégés in jails, or in asylums, or in hospitals, or in our schools and universities? Such a "white man's burden" would be a vastly greater problem than is our present race problem or that of eugenics.

We should indeed be thankful that such a fearsome regimen does not obtain. It is obvious that stability of type is the divinely ordained order, and a beneficent one it is; while some degree of elasticity within the type (species) is no less rational and necessary.

Perhaps the evolutionist will smile at the foregoing

delineation. But we would kindly inquire, Why, if evolution is the dominant law of nature, is such a supposition absurd? Besides, it is difficult to see how the law of evolution, which is a law of change, could give rise to its precise opposite, the law of stability. We cannot help believing that, if ever evolution was operative, it ought to be operative now, and that if it is, there should be many intermediate grades between the bestial and the human. However, we are most grateful that it does not continue to function, if it ever did. The biblical economy is the only rational one; namely, that God created the animals to be animals and to remain animals, while He made men to be human and to stay human.

Still Another Non Sequitur

A writer for the New York *World* recently commented on some supposed mistakes of the late Mr. Bryan. He tried to make it appear that these blunders were quite schoolboyish. Having no brief for Mr. Bryan, or any authority to defend his memory, we leave that privilege to others. Only it should be said that his critic picked up a few small technical errors, and made an unwarranted to do over them. It may be well to see whether the critic himself does not live in a glass house.

He accused Mr. Bryan of saying that "no species has ever been traced to another species." Then he declared that "Mr. Luther Burbank smiles at such assertions, for he is creating new species out of older species right along." Of course, Mr. Bryan meant that no new species has ever emerged from another species through natural evolution; which is true. But the reference to Mr. Burbank is not a happy one; for his artificial culture of plants and flowers is far from proof that nature left to

herself would ever produce the remarkable results which he has obtained. Moreover, what would become of all his cultivated varieties if they were left to nature's own forces for fifty or a hundred years? Would she preserve and perpetuate them and evolve them into still higher forms? Every one will agree she would not.

Then the critic refers to "the wonderful story of Marquis wheat," which is raised in Canada. The process by which it was produced is really most interesting. The male parent, red fife, came from mid-Europe; the female parent, "hard red Calcutta," was imported from India. Dr. Charles E. Saunders "crossed the two imported species and obtained a medley of types, which he assorted, and from which he selected the most promising."

Note the special care with which the experimenter assorted and selected his material. We quote from the article: "Each of the heads selected was propagated; most of the results were rejected; the rest were sifted again and yet again; and finally Marquis wheat emerged, rich in constructive possibilities, probably the most valuable food-plant in the world." Then our champion of evolution concludes: "So here at least is one species which came from another species, not in the ancient times, but since Mr. Bryan has been in the limelight."

And this, the writer thinks, proves the doctrine of natural evolution! But a little critical acumen should be used in drawing conclusions. Observe in the above quotation how the human manipulator "selected," "rejected," "elected" and "sifted again and yet again." Could nature herself have performed such exploits of carefully calculated scientific selection, all of it done with a distinct purpose, working to a distinct end, and designed by a human experimenter? Is it likely that nature, left to her own way, would ever have brought "red fife" from

mid-Europe and "hard red Calcutta" from India over to Ottawa, Canada, and then effected the scientific combinations made by Dr. Saunders? Only a man with a perfervid imagination could make himself believe that nature would have ever performed such an exploit.

And, again, what would become of Marquis wheat were it left to itself for half a century? The answer is self-evident—it would either perish or revert to an inferior type. Besides, even in this case no distinct species was produced. The parents were not two differentiated species, but both were *wheat,* not something else, and their offspring is, therefore, only a cultivated variety.

The opponents of evolution do not deny that human genius produces wonderful results in nature. By the careful and painstaking study and use of natural substances and forces man has been able to construct the telephone. Would nature herself have ever constructed a telephone? As has been previously shown, man's capacity for improving nature is recognized in the Bible, and thus his genius in this direction confirms its teaching.

The author ventures to inject a thought here that has occurred to him since the foregoing was written. It is suggested for judicial consideration. It is said that Burbank has taken the common desert cactus, and has converted it, by careful cultural treatment, into a fairly edible plant. Now, it may be that all such instances of man's ability to tame wild species and make them useful are indicia that, in their original created state, they were good and serviceable, as is taught in the first chapter of Genesis, and that they still retain the genetic potentialities for being restored. Perhaps this is a hint of the coming time of "the restitution of all things." The prophet forecasts an era when there shall be nothing hurtful "in all

God's holy mountain"; [8] and the apostle declares that "the creation itself shall be delivered from the bondage of corruption into the glorious liberty of the children of God." [9] There are certainly promises in God's Word of a time when man shall have complete dominion over the realm of nature. Instead, therefore, of looking for evolution in nature's domain, perhaps it would be wiser and more scientific to look for restoration.

The Evolution of the Horse

The American Museum of Natural History, New York, has issued a Guide Leaflet [10] in which the authors have obviously put their best foot forward. The work is very technical, and teems with polysyllables and difficult terminology. This is, of course, as it should be, for we cannot have science without nomenclature derived from fixed languages, and Latin and Greek are the best languages upon which we can draw; but we would remind people that when Christian theology, which is also a science, uses such technical terms, no objection should be raised by those who want to be considered scientific.

Some evolutionists think that the argument for the development of the horse is the strongest argument that can be brought forward for the general theory. Our recollection is that Huxley so regarded it, and looked upon it as absolutely proved. Of course, if it could be shown to be valid, the anti-evolutionists might as well give up their case.

We must, therefore, be all the more careful in our testing of the statements of this pamphlet. To our mind,

[8] Isa. xi.9. [9] Rom. viii.21.
[10] Matthews and Chubb, *The Evolution of the Horse.*

its presentation is far from convincing, and in some aspects seems to be impossible; and we shall try to show why. We begin with this statement: "The *Hyracotherium* is the most primitive stage known; but only the skull has been found, so that it has not been determined exactly what the feet were like." [11]

Let it be remembered that the theory is this: The original ancestor of the modern horse was a small creature with a number of toes on each foot which, in the course of millions of years, became consolidated into a hoof. Our scientists say in the above quotation that "only the skull" of the primitive creature has been found. Then they do not know "exactly" what the feet were like. Do they know at all what they were like? How can they know if only the skull has been found? Yet they build their theory upon the *assumption* that its feet were of just the right kind to be evolved into the next member of the series! Thus the hypothesis is built upon a guess for which there is a very meager foundation. Is that science—"verified knowledge"?

Another serious difficulty arises at this point. The only known specimens of *Hyracotherium* were found in the London Clay or Lower Eocene in England. The descendant of this creature next in the series as far as discovered is *Eohippus*, which, say the authors, is "much better known." But where were the fossils of *Eohippus* found? In Wyoming and New Mexico—that is, in the western part of the United States. Yet *Eohippus* is supposed to be the scion of the English breed. Such an inference demands a great stretch of the imagination. How the little English creature and his offspring made the journey over land and sea to America deponent sayeth not. Are such suppositions to be regarded as "science"?

[11] *Ibid.*, p. 15.

And are people who are skeptical of inferences so drawn to be scorned as "abysmally ignorant"?

The front foot of *Eohippus* had four toes and the hind foot three, while "the splints of the first and fifth digits can still be detected in some species."

Observe the word "still." This must mean that, while only the skull of the first member of the series, as has been said, was found—so that no one knows what its feet were like—yet it is assumed that it had five toes on its hind feet, of which the "splints" in the feet of *Eohippus* are vestiges. Here we have a case of the *non sequitur* almost with a vengeance.

Difficulties multiply: "The earliest known ancestors of the horse were small animals not larger than a domestic cat," etc.

In their study of natural history in the empirical fashion, do scientists know of a single species or kind of animal that increases in size in the way this progenitor of the horse is supposed to have increased? Is it not true that each type maintains its regular or normal size, with only comparatively slight variations? Who can prove that nature once operated in so different a fashion from what she does now? If animals once increased in bulk in that way, they should do so now, and we ought to see cattle, horses, elephants and other creatures constantly adding to their dimensions. But we know that such things do not occur.

Drs. Matthews and Chubb tell us that *Eohippus* was "not larger than a domestic cat." Dr. Vernon Kellogg, in his *Evolution,* says that it "was a little larger than a fox." Which is right? If the scientists have the actual fossil remains at hand, why is there a difference in the reported size of *Eohippus?*

This pristine creature had a good supply of toes—

four on each fore foot, three on each hind foot. Kellogg says that they were "hoofed toes." Now, to our mind, the crucial question is: How can the scientists account for the evolution of so well-equipped an animal away back in the Lower Eocene epoch? How came he to have four toes on each front foot and three on each hind foot? He was certainly quite a complex animal. It would seem that so many toes would involve a good deal of previous evolution. However, as has been seen, a guess is made by the scientists that *Eohippus* had an ancestor—*Hyracotherium*—which was still better supplied with toes, because *Eohippus* has some "splints of the first and fifth digits," which are supposed to be vestiges of his five-toed predecessor. But how came this ancestor to have so large a supply of toes? Did he have an ancestor with six toes?

Let us also do some guessing. Might this have been the line of progress? In remote times there was an ancestor which had only one toe on each foot; then this toe evolved into two, three, four and five toes respectively; then evolution took a reverse turn; having evolved five toes, it began a back-track development toward only one toe. Which case was evolution and which devolution?

But we must ply the scientist with more questions. If *Eohippus* could walk comfortably on his feet as they were, why did he have to make any change? What advantage would there have been in reducing the number of his toes? Again, if walking on the flat of his foot was his natural mode of locomotion, why would he begin to walk on the tips of his toes, which would have been a painful way of walking? Of if one animal was determined to walk on the tips of his toes, why would all his offspring continue the laborious process for a million years? Do we see animals performing such exploits to-day? Since historic time began, we do

not know of an animal species that has lost a single one of its toes.

If *Eohippus*, as Dr. Kellogg says, had "hoofed toes," it must have been natural for him to walk on those hoofs. Then what could have caused any change? Why would the toes have had any tendency to grow together? Was not the animal in accord with his environment? If locomotion on his hoofed toes was not normal for the creature, why was he evolved in that way in the first place? It would seem that he should have been a one-hoofed animal from the start.

Was not a creature with three and four toes on one foot a higher type of development than a creature with only one toe? Would not a number of toes, cleanly parted, be harder to evolve than only one toe or a solid hoof? Why did evolution take so roundabout a way? And then, if an animal kept walking and running on his cleft toes, how could they ever grow together? They would surely be constantly pressing apart. The sheep and the cow divide the hoof, and have done so from time immemorial. Their hoofs show no proclivity for growing into solid hoofs. Why is it that only one line—the *Equus* family—has the tendency to develop a solid hoof?

However, we must be fair. Most of the evolutionists do not think that the digits of the horse's ancestors became consolidated into a hoof. Some of the toes were sloughed off through disuse, while the middle toe, which had to perform the chief duty, became enlarged into a broad and solid hoof. Well, let us consider that proposition. We must use our imagination a little. Suppose that *Eohippus* had four hoofed toes on each fore foot. He must have walked on all four of them or they never would have been evolved into useful hoofs. But if he walked on all four, none of them could have begun to shrink. As

long as they were in use, they would have remained intact, according to the law of evolution itself.

Or suppose some of the toes were shorter at the start than the rest; how did they become shorter? What could have led evolution to reduce them? Would not that shortening have made the animal walk unsteadily? Or if not that, as the shorter toes were evidently needed to preserve the animal's balance when his weight pressed down hard on the middle toes, the shorter toes would still have been needed for that purpose, and therefore evolution would require that they remain short toes. Had they become shorter and shorter, the process would have certainly been a handicap to the animal. It is not probable, either, from what we know of nature's processes, that the middle toes would have increased through use, for all animals to-day use some parts of their bodily structure more than others, but those parts do not show a tendency to develop into larger and larger dimensions, while the less used parts disappear. We have no scientific right to say that nature's processes were different millions of years ago—when no one could observe them—from what they are to-day when men can observe them. The small "false hoofs" of most split-hoofed animals are called "non-functional"; yet they show no disposition to disappear. Why should the non-functional toes of *Eohippus,* if he had any, have disappeared?

Note these statements, referring to *Eohippus:*

> The proportions of the skull, the short neck and arched back, and the limbs of moderate length, were very little horselike—recalling, on the contrary, some modern carnivorous animals, especially the civets (*Viverridæ*). The teeth were short-crowned and covered with rounded knobs of enamel, suggesting

those of the monkeys and pigs or other omnivorous animals, but not at all like the long-crowned complicated grinders of the horse.[12]

One would think from these frank admissions that the evolutionists are going far out of their way to establish the pedigree of the modern equine. Is it not a far cry from the horse back to a creature so much unlike itself? We do not see nature achieving such metamorphoses to-day; rather, we find stability of type to be the rule; therefore the so-styled evolution of the horse lacks scientific verification. One of the main contentions of the evolutionists is "the uniformity of nature's processes." Why, then, did nature act so differently millions of years ago from what she does now?

The claim is made that the horse's hoof has splints which seem to be vestiges from remote predecessors. We do not see why they should be regarded as vestiges. They may be the necessary constituents of the horse's hoof, to give it some degree of elasticity. It stands to reason that even a horse's hoof should have some spring to it.

But *Eohippus* had a number of successors, called *Orohippus, Mesohippus, Protohippus,* etc. These have been so serially arranged by the scientists as to convey the impression that they gradually lost their outer toes, while the middle digit increased in size and became compacted into a solid hoof, such as the modern horse possesses.

The difficulties of this hypothesis seem to be insuperable, chiefly because hundreds of thousands, sometimes millions, of years are said to have elapsed between the several members of the series. Besides, the fossils of the

[12] Matthews and Chubb, *The Evolution of the Horse,* p. 15.

different species were found in geographical regions far distant from one another. None of the intermediate grades have ever been found. Thus it is impossible to make out the case for evolution from the data at hand. Frankly, it all seems to be impossible. If *Eohippus* and the rest ever really existed, it is most probable that they, like all animals known to-day, procreated after their kind. Like so many other ancient denizens of our globe, they became extinct—no one knows why—and left no genetic successors.

The Tedium of Evolution

To speak plainly, albeit without scorn, evolution is too slow, too non-progressive. Let us "mark time" with its tedious ways. It took a million years (perhaps many more) for the amœba to develop into a mollusk; then a million more for the mollusk to evolve into a fish with a backbone; a million more to evolve an amphibian; another million to evolve a reptile; how many more millions for a reptile to evolve into a bird no one knows; some more millions to develop a mammal; more tedious millions to reach the anthropoid apes; and something over a million for man's ancestors to "learn to walk on their hind legs" (Van Loon). A good many hundred thousand years were then consumed in evolving *genus homo;* and even he continues to commit numberless logical and ethical blunders! Worst of all, God is held responsible for the whole humdrum procedure. For our part, we think that six to ten or twenty thousand years would be ample for the development of the world to its present poor status. Even as it is, we are sometimes impelled to exclaim, "How long, O Lord; how long?"

Suppose men and animals have been on the earth ten

thousand years. Would not that be plenty long enough for God to bring the world to its present state of development? Surely it should not take Him very long to make mechanisms which have no free will of their own. An animal begins its life with an impregnated cell. In a few months it is born, and a few days later it may be skipping friskly about. A fertilized egg becomes a lively chick in four or five weeks. Even a human being, beginning with a cell, grows into a matured person in twenty-five years. Many of nature's processes are reasonably rapid. That affords an analogical reason for believing that man, too, may make rapid progress if he will. If evolution is the law, however, several more millions of years will be consumed in bringing in the era of the "superman" or the super-race.

But if the human race started ten to twenty thousand years ago, why is it that it has taken God even that long to lead man thus far on the road of progress? Because man is a free moral agent. Therefore his will must always be taken into consideration. If God does not want to destroy man's moral agency, He must permit him to have a degree of liberty. God could make mechanisms in short order, and could quickly develop them to any degree of perfection He might choose; but with Him the difficult problem (we speak reverently) is to develop moral beings in the highway of progress without nullifying their freedom. Thus God has a valid reason for bearing with the sluggishness with which mankind moves forward. But there is absolutely no good reason, moral or otherwise, for His consuming ages on ages in making mere mechanisms, and especially in evolving man from the amœba to the point where it becomes a real moral agent. How could God find delight in sitting by and watching so dreary and prolonged a process?

The Overdone Vestige Theory

An excellent little book, entitled *Two Great Bible Plans Paralleled,* by a well-informed physician, Dr. J. K. Miller, deals effectively with the so-called vestige theory. As a physician, with a technical knowledge of human anatomy and physiology, he tells us about the nature and functions of the vermiform appendix, and shows how unscientific it is to regard it as a relique of man's animal pedigree. Let Dr. Miller speak for himself:

> As an example of more recent proof of man's animal ancestry, the appendix is brought forward as evidence more frequently than any other so-called vestigial part or appendage. A recent authority asserts that man's progenitors lived on roots and barks of trees. These, to become digestible, must needs go through a sort of macerating process. An extra stomach for the purpose was thus necessary. The bovine and other quid-chewing animals—from which the scientist gets his idea—have a similar physical mechanism. As man became more civilized, his food changed to a higher order for which this special process was not needed. Hence this particular stomach on account of disuse became atrophied, and the appendix is the relic or vestige.
>
> This is theory only, for the facts will not support it. The facts are these: The appendix is twenty feet [13] from the normal present-day human stomach where food is received. Between the two organs is an intestinal tube of comparatively small caliber,

[13] Feeling a little skeptical of Dr. Miller's figures (twenty feet), we wrote him regarding them. He replied: "Twenty feet is correct. Food, leaving the stomach, travels that far before it reaches the appendix region."

whose lumen grows less toward the lower or distal end. Practically all the nutrient elements of food are digested and taken up as they pass through this portion of the digestive tract. Moreover, this tube does not end in the appendix, nor has it any direct connection therewith. It empties its remaining contents in the colon or large bowel. This entrance is made through the side of the large intestine several inches from the end to which the appendix is attached. This anatomical arrangement makes it impossible for the appendix to receive the coarse fiber of roots and barks as a laboratory for their preparation for further digestion and assimilation. It is at the wrong end of the digestive apparatus. The theory is puerile, and will not hold.

While we think of it, we must add that the cattle of our vicinity which chew the cud do not eat the tough fibers of bark and roots, but the softest and lushest kind of grass that grows in the green pasture fields. On the other hand, some dogs of the neighborhood devour tough meat and crack hard bones and swallow them, and yet they do not have a secondary stomach, but get along very well with only one. And so have their forebears been doing all through the ages. The chickens and birds, some of which eat coarse and hard food, manage very well with a single craw or gizzard. It would seem, as a matter of fact, that the ruminants are the animals that eat the softest and most easily digested foods. Evidently their second stomachs have been given them for a different reason than that which has been assigned by the purveyors of evolution, proving once again how facts must be strained to the breaking point in order to bolster up a weak theory.

Dr. Miller also gives a telling blow to another much-overdone factor among the propounders of evolution:

> A recent work on science—four volumes; one of the latest authorities—accounts for the absence of hair on the human body through the use of clothing. When clothing came in vogue, the body was wrapped with skins, while the legs, arms and head remained exposed; hence the excess of hair on these parts, while the body has scarcely more than a hirsute covering. However, the facts are that the cleanest bodies in the world are found in the tropical countries, where no clothing is worn save the breech-cloth, underneath which is found the only hair present on the body.
>
> [Again our author replies in this way to the claims of the aforesaid "latest authorities" in science] The bald heads, now so common, they attribute to the wearing of hats. However, the bald head is seen quite as commonly, if not more frequently, in the office, the store and the counting room where hats are worn but an hour or two a day, while the farmer and day laborer, whose heads are covered many hours a day, very generally have an abundant growth. Hats may be one of the causes, but all too frequently there are other causes which must be held responsible, as every physician knows.

At every point, it would seem, the evolutionist's theory has a hard struggle for existence.

The Doleful Outlook of Some Evolutionists

It is obvious that some of the devotees of evolution do not have a very encouraging outlook. They contem-

plate the future of the race with more or less foreboding. A monograph, written by Carroll Lane Fenton and entitled *The Building of the Earth,* is most informing. The author is an out-and-out evolutionist, and indulges in a good deal of scoffing at those who do not fall in with his views. His book shows how scientific opinion has shifted regarding the nebular hypothesis, which at one time was generally accepted among scientists. He proves definitely that it is no longer tenable. He brings forward an argument for the planetesimal theory, which seems to him to be more reasonable, but which impresses us as being made up of many improbable surmises. One cannot help wondering whether the earth was really formed in that peculiar way. However, for the present we have no criticism to pronounce on the theory.

Our purpose now is to call attention to the lugubrious note sounded by the evolutionist regarding the future of the human race. One would naturally think that such a long-drawn-out process as evolution would have a bright and felicitous outcome. If it does not, what is the use of it all? Well may we exclaim, *Cui bono?* Let us hear what our evolutionist has to say on this point:

> And now we come to the question of purpose: a question that must ever rise in the human mind as it seeks to grasp the facts discovered by science. And by those facts, and the conditions which they disclose, we are baffled. We are no longer able to assume, in our limitless egotism, that all things were made for the welfare and pleasure of man; that the sun was created to furnish him light and heat by day, while the moon and stars were placed in the sky to provide light and beauty at night.

Seeing that man is the highest being living on this mun-

dane sphere, we can conceive of no other reason for the light and beauty of the heavenly bodies than that they were made for his benefit. If they were not, why were they made? Why should it be looked upon as "limitless egotism" for man, a sentient, self-conscious and rational being, to desire to glorify God and enjoy Him and His marvelous universe forever? Surely it would be no mark of greatness or humility for him to want to live on this earth for a few years and then perish forever.

Our author next employs some long sentences in describing the process by which all life was evolved through countless ages until man finally emerged. Then he continues:

> Finally, after the passage of almost unmeasurable ages, man appeared, and began to assume the center of activity on the stage of life. Slowly, it seems, yet in reality with almost incredible swiftness, he progressed until his domination over other animals is almost complete. In the years to come he may carry on his advancement to almost unbelievable heights, or by failing to control and direct his own evolution, he may fail, as other creatures have failed, and go down the swift path to extinction. But whether he triumphs or fails, the processes of the universe will go on, and some day the end will come. Eventually the light of the sun will die out, or the planets will be torn to fragments by the attraction of a passing star. The solar system will pass into oblivion, and the purpose of its existence, if indeed there is a purpose, will remain forever unknown.

Here the pitiful tale ends. It is a real "sob story." After advocating the great and salutary doctrine of evolu-

tion over many pages, and flinging many abusive epithets at people who do not accept it, this is the author's dismal finis! Over it all is inscribed, "Ichabod!" And yet its advocates assert over and over again that all "progressive" people accept the theory of evolution. Unmeasured ages of evolution, and then—the bursting of a bubble, the sizzle of a skyrocket!

Another emotional evolutionist arrives at practically the same conclusion as does Mr. Fenton. We refer to Professor Raymond C. Osburn, of the Department of Zoölogy and Entomology in the Ohio State University. Mark the final destiny which he predicts for the human family.[14] The Foraminifera—a class of protozoa (first living forms)—continue to this day, he says, and so have outlived the great dinosaurs by millions of years. Then he adds: "Man, who has been on the earth only a mere half million years or so, has scarcely been given a fair trial to prove his fitness, and the probabilities are that the foraminifera will continue to flourish long after man has definitely proved his inability to cope with changing conditions."

In contrast with these depressing forecasts, suppose we place the teaching of the Holy Scriptures: "Jesus Christ hath brought life and immortality to light through the gospel"; "For we know that if our earthly house of this tabernacle were dissolved, we have a building of God, an house not made with hands, eternal in the heavens"; "All things work together for good to them that love God, to them that are the called according to His purpose"; "To an inheritance incorruptible and undefiled, and that fadeth not away, reserved in heaven for you, who are kept

[14] *Some Common Misconceptions of Evolution*, p. 185.

by the power of God through faith unto salvation ready to be revealed in the last time"; "Nevertheless, according to His promise, we look for new heavens and a new earth, wherein dwelleth righteousness."

CHAPTER X

THE CHANGING VIEWS OF THE SCIENTISTS

Sometimes it is charged that Christian people have been compelled to reverse themselves more than once in the face of scientific discoveries; therefore it is assumed that they are mistaken to-day in upholding the doctrine of special creations, and will eventually have to accept the hypothesis of evolution. The change of position among Christian people in regard to the Copernican theory of the solar system is invariably cited by these accusers.

No one will deny that theologians have sometimes had to change their conceptions about some things. The fact that they have done so proves that they are not so conservative as to be unwilling to accept evidence when it becomes convincing. But that surely cannot mean that they must shift their position for every wind that blows.

The Ptolemaic and Copernican Views

Christian theologians, however, are not the only people who have had to change their views before advancing knowledge. How often has science been forced to reverse itself? For many centuries practically all scientists held to the Ptolemaic theory of the universe. They had worked it out to a degree of minuteness that was ingenious and wonderful. All of us remember about their cycles and epicycles. Aristotle, the philosopher, engaged vigor-

ously in this high kind of theorizing. And so it went on for centuries, until the coming of Copernicus and Galileo. Even in their time many scientists scouted the new hypothesis, and held it to be impossible and absurd. The renowned Swedish astronomer, Tycho Brahe, who lived a century after Copernicus, wrote a learned treatise against the Copernican theory. But the scientists finally had to accept the new views, just as did the churchmen. It was to the credit of both of them that they were persuaded by convincing evidence. It is also to the credit of both that they clung to the old views until the new views were validated.

Physiology, Biology, Physics and Chemistry

When Harvey discovered the circulation of the blood, the scientists were forced to give up many of their outgrown theories of physiology and fall in with the new facts. In chemistry, physics, biology and embryology what a shifting of theories has characterized the scientific world! A textbook on these subjects that is ten years old cannot be used in colleges and universities to-day. The discovery of steam and electricity as motor forces revolutionized the views of the physicists in many respects. That infant science, biology, has caused many revolutions of viewpoint among the scientists. In his day Charles Lyell said: "The French Institute enumerated not less than eighty geological theories which were hostile to the Scriptures; but not one of these theories is held to-day."

The Nebular Hypothesis

But note the shifting of position that has taken place within the memory of many people now living. In our

college days the nebular hypothesis was generally held. It seemed as if almost every person of intelligence accepted it. The theologians were wont to prove, by an elaborate argument, that the Bible and the nebular hypothesis were in the most perfect agreement. The writer confesses that he himself often joined the reconcilers. To-day the theory is held by many scientists to be inadequate. Too many facts are against it. The so-called planetesimal hypothesis is much in favor at present, and promises to supplant the other. The inadequacy of the nebular hypothesis is ably set forth in *The Evolution of the Earth and Its Inhabitants* whose composite authorship consists of five professors of Yale University. The first chapter, entitled "The Origin of the Earth," written by Professor Joseph Barrell, deals with the relative merits of the nebular and the planetesimal hypotheses, and exposes the weakness of the former.

Atoms, Ether and Darwinism

Note, too, the shiftings of the physicists. Time was when the atom was regarded as the ultimate particle of matter. It was thought that the "atomic and molecular" theory of matter was settled once for all. And how eruditely scientists talked about the atoms! But nowadays science has changed its viewpoint, declaring that the atom is not small enough to be the ultimate particle of matter; it is composed of electrons; and it requires many thousands of these smaller particles to form the various kinds of atoms.

Once, too, the Universal Ether—the so-called Ether of Space—was regarded by the scientists as the substratum of all palpable substances, the connecting link in all space, and the purveyor of gravitation. But nowadays even

the existence of this Ether is doubted by many scientists. Indeed, many of them are denying that matter is an entity at all; what seems to be palpable substance is not real matter, but is composed of centers of electrical or some other kind of energy—as if *nothing* could be endued with force and become phenomenal! The fact is, at present the physicists and chemists are "all at sea" regarding the nature and composition of material substance. In fact, human science seems to be in an extremely fluid state. The direction of to-morrow's breezes no one can foretell.

Another change of front has recently taken place among the evolutionists, who so often assert that their theory has been "established beyond a doubt." In our college days Darwinism was the fashionable cult among the scientists who accepted the theory of evolution. Natural and sexual selection, the struggle for existence and the survival of the fittest were the shibboleths of that day, and were sufficient to account for every phenomenon in the organic world, given a few primordial germs to start with. To-day Darwinism as an explanation of the evolutionary process has been cast overboard, and by the scientists themselves. Scott, Bateson, Osborn, Conklin and Keen tell us so in decided terms. Says Professor James H. Robinson: "Darwinism, as understood by paleontologists, is as dead as . . . Senator Rush of Kentucky would care to see it." Dr. William H. Keen, another advocate of evolution, agrees with this dictum, and complains that some uninformed people to-day "confuse evolution with Darwinism." This is another decided somersault in the world of science.

Not long ago the favorite claim among many scientists was that man has descended from the monkey. Then they said, no, not the monkey! the ape, the anthropoid ape! But now such a view is called intolerable; man

has not descended or ascended from any known monkey or ape; man and the simians trace their pedigree back to an unknown animal, the Primate, which is their common ancestor. This makes the theory much more palatable, because it pushes the origin of the human race far back into the region of the unknown! Only the scientists seem to forget that, if this new theory is true, man came from an animal still lower in the scale than the present-day monkeys and apes. Here is another reversal on the part of the scientists.

Why Man Made Progress and Apes Did Not

In reply to the question why the humanoid members of the primate stock back in the dim past became progressive, while the apes, monkeys, and baboons remained conservative and stationary, Dr. W. K. Gregory, of the American Museum of Natural History, has this to say: "It is safe to assume that the action of glandular secretions in the humanoid stock, particularly the pituitary gland, was responsible for the rapid brain development and other structural changes, the erect posture, shorter teeth, speech, and other characteristics that distinguish man from the ape." [1]

However, another professor of science attempts to give quite a different explanation of the origin of *homo sapiens.* Professor H. H. Lane, of the department of Zoölogy in the University of Kansas, has written a book entitled *Evolution and Christian Faith.* What is his theory of the cause of the progressive movement of the humanoid stock? He finds it in primeval man's assumption of the upright position and the free use of his hands. He says it was a momentous day in human history when the "pre-

[1] *McClure's Magazine,* March, 1923, p. 24.

man adopted the upright position, and thus liberated his hands for uses other than locomotion. . . . All civilization has inevitably come from manual dexterity."

On such slender guesses some of the scientists hang their view of the origin of man. We would ask, Why and how did the pre-man begin to assume the upright position, while his cousins, the apes and monkeys, did not do so then, and have never done so since? However, our chief point is that Professor Lane differs widely from Dr. Gregory in guessing why and how primitive man started on the upward path of progress—one says it was due to the pituitary gland; the other to the assumption of the upright position. These widely variant guesses prove that neither knows anything definite about the causes of man's development.

Another theorizer who seems to have a new idea of the process by which the anthropoid ancestor developed into man is Professor James Y. Simpson, of New College, Edinburgh, Scotland.[2] According to him, it happened in the western section of the plateau of Thibet, not in Mesopotamia or Babylonia, as most scientists have held heretofore. Due to the uplift of the Himalayas, the forests dried up. This condition compelled the primitive ancestors of men and apes to descend to the ground, which was man's "first call to rise." The anthropoid apes chose to migrate southward to a warmer climate, and thus remained arboreal folk or tree-clamberers. But the humanoids, of a more hardy nature, remained in the more northern regions, and decided to live upon the ground instead of in the trees. This was "a desperate and hazardous adventure for arboreal forms during a period which was in many respects the zenith of mammalian carnivorous life." But the adventure was worth while, for the

[2] See his *Man and the Attainment of Immortality.*

new environment, "with its challenging stimuli and beckonings, resulted in further mental advance." In fact, the new surroundings and activities reacted on the brains of man's ancestors, and "the steady growth of the brain reacted upon the general shape of the face and skull." Now, just give the process plenty of time, millions of years, and *homo sapiens* is the result! Mark the difference between this account of man's origin and evolution and the theories advanced by Lane and Gregory, described above.

Inheritance of Acquired Characteristics

On another question there is much diversity of opinion in the scientific world—the inheritance of acquired characteristics. Herbert Spencer contended with might and main that, if such traits were not handed down from parent to offspring, there could be no evolution; and we believe he was right. But many scientists to-day deny this view, and cite numerous facts and arguments against it. But along comes Paul Kammerer, an Austrian scientist, who stoutly maintains the doctrine, and even holds that changes are wrought in the germ-plasms by the transmission of acquired peculiarities. Which parties in the contest are right?

Differences Regarding Miracles

A Christian believer, however much he may differ from Professor H. H. Lane,[3] cannot help feeling gratified that he does his best to uphold the Christian faith and reconcile it with the evolution hypothesis. He accepts the miracles of the Bible, among them the virgin birth of

[3] See his *Evolution and Christian Faith.*

Christ, and says that these facts are beyond and above evolution; they are something in addition to the processes of nature. Whether this position can be consistently maintained is doubtful. It certainly differs from the opinion of Professor Conklin, of Princeton University, who, in his work, *The Direction of Human Evolution,* presents the theory in such a way as to exclude the supernatural altogether. The same is true of the Osborn-Gregory article in *McClure's Magazine;* also of the two recent books by Yale University professors, in conjunction with Professor Conklin, *The Evolution of the Earth and Its Inhabitants,* and *The Evolution of Man.* Joseph McCabe also finds no place for the miraculous or supernatural in nature's processes. On the other hand, Dr. W. W. Keen,[4] argues that evolution demands God, and believes that, after he has relegated certain parts of the Bible to the limbo of myth and poetry, Christianity is consistent with evolution. Thus do the scientists differ among themselves.

Is Man Bestial or Not?

Mr. Carl E. Akeley, sculptor and big game hunter, who made the famous "Chrysalis," the statue representing a youth emerging from a gorilla, has been defending the animals from the charge of bestiality. He holds that "the lion is a gentleman and a sportsman; the gorilla is pathetically affectionate, while the elephant is a charming creature." Mr. Akeley has done much hunting in the Belgian Congo, the center of Africa, and has come to the conclusion that animals have been grossly scandalized by being called "bestial." He declares that man is the only

[4] *I Believe in God and in Evolution.*

creature to whom that adjective may be rightly applied. "It is man who is bestial," is his assertion.

If that is so, it disproves evolution; for then man, instead of having been evolved, is a degenerate form. He is another case of *de*volution rather than of *evo*lution. Besides, the defenders of evolution, especially those of a theological cast, have been assuring us that sin is merely the remains of man's heritage of animalism. Mr. Akeley runs counter to this view in holding that animals are respectable creatures, while man alone is bestial in nature. If animals are such excellent creatures, man never could have inherited his meanness from them. It must come from some other source. Whence? In this way evolutionists annihilate one another.

Man's Original Habitat

Everybody, no doubt, has been reading about the Los Angeles fossil man, found near that city. The claim is now being made by some "scientists" (who, by the way, "prove" everything before they make any assertions!) that the human family got its start here in America. The newly found fossils belong to the Pleistocene Age, and their human owner must have lived 500,000 years ago—perhaps more. If this "find" is genuine, "the first real men lived in America." This view will completely upset the former theory of the evolutionists that modern man was born in Asia and migrated to America. For many years, the evolutionists have been sure that this was "the fact," and no one had a right to deny it. Now some scientists are seriously advocating the view, on the ground of a few fossil remains, that the human race started here in America and crossed over the Bering Strait, and thus populated the eastern continent. Recently Dr. H. F.

Osborn has been just as sure that he could prove man's natal place to have been the Gobi Desert in Mongolia, China. Cannot every thoughtful person see that the scientists are merely guessing? Where are their "established facts"? So-called "science" is becoming renowned for its numerous ex-theories.

If the latest "scientific" facts prove to be "facts" indeed, and not mere guesses, the Trinil, Heidelberg, Piltdown, Neanderthal and Cro-Magnon men will all soon be sadly out of date. Worse than that, they will be "anachronisms." The evolutionists have been relying on those fossils, meager as they are, for the main "proofs" of their theory. However, they claim that those men lived only from 25,000 to 50,000 years ago. But the Los Angeles man was hiking about in America over 500,000 years ago. Therefore, those ancient gentlemen of Europe and Java could not have been the progenitors of the human family. Thus the whole theory of "scientific" evolution is theatened with annihilation.

Is There a Struggle for Existence?

Just to indicate still further variances among the evolutionists, attention is called to the fact that J. Arthur Thomson contends that animals are not engaged in a hard and selfish "struggle for existence," but that, on the contrary, many altruistic traits of character are exhibited by them.[5] In many ways, he holds, they are mutually helpful. Hence the theory that man descended from a brute stock is supposed to be made much more palatable to the long-suffering public. However, we would remind our readers that only some two years ago Drs. Osborn and Gregory, among the very *élite* of the evolutionary school,

[5] In his *What is Man?*

stoutly maintained that the struggle for existence—with its correlate, the survival of the fittest—was the law of nature from the start and that it is the dominant law to-day.

J. Arthur Thomson also holds that man never was an animal. He was never, according to this savant, a fierce, beastly looking creature like the primitive man recently pictured in *McClure's Magazine* and *Popular Science Monthly*. Thomson claims that the first man sprang suddenly by a big leap (a "mutation") from the primate stock into a human being. From the start he was a full-fledged man, not a monkey-man, not even an ape-man. This is utterly different from Darwin's theory; also from the recent claims of some of the leading evolutionists, who have been loudly asserting that man emerged by a gradual process from the pre-ape and sub-monkey state into the "humanoid" state.

But why and how did the primitive man happen to make this great saltation from the animal to the human status? What force caused him to take so sudden and tremendous a leap? To these questions Professor Thomson vouchsafes no reply. But he does try to find a parallelism which he thinks may throw some light on the subject. Here it is. Now and then in human history "sports" occur—that is, geniuses suddenly spring up. Mention might be made of such men as Homer, Plato, Moses, Paul, Augustine, Luther, Shakespeare, Washington and Lincoln. Just as these men rose suddenly from the general mass of mediocre individuals, so the first man sprang up suddenly from the primates into a truly human personality.

How does this explanation appeal to the thoughtful reader? Does it seem probable, possible or reasonable? Is there any empirical proof of the theory? If so, where?

Has anyone ever witnessed the sudden saltation of a human being from an animal stock? Not only has this never been seen, but the parallelism of the sudden rise of human geniuses will not hold. There are few instances in human history in which genius-like qualities carry over into the next generation. Therefore analogical reasoning would lead us to conclude that the descendants of the "sport" man of evolutionary fame would have reverted to the common primate stock. Such has always been the fate of the offspring of "sports" in both the natural and the human world.

Where Are Man's Real Ancestors?

A fatal difficulty about the transformist method of explaining the origin of types and species is this: None of the anomalous creatures from which they sprung are to be found anywhere, either in the world to-day or in the geological remains. All of them are without discoverable ancestry. To make our meaning plain, where is the strange creature from which the vegetable and animal branches of the well-known "genealogical tree" sprang? It can nowhere be found. Again, where is the creature styled the "primate stock" from which the simians and their human relatives branched off? Echo simply answers, "Where?" The progenitors of men and monkeys have all disappeared and have left no trace. The Trinil, Piltdown, Neanderthal and Cro-Magnon men were not the predecessors of *homo sapiens* (the human being of to-day), but branches that broke away from the main stem ages ago. Thus they and man have no living ancestors; neither can any fossil remains of such ancestors be found in the cemeteries of the past. Really, it would seem that the old Darwinian theory of descent had a bet-

ter basis than the present one has, for, according to the old view, some kind of a lineage could be traced for the various forms of life, however meager and unconvincing the data may have been.

Why have the evolutionists thus shifted their position within recent years? Because they are coming to see for themselves that no evidence has been forthcoming to prove the transmutation of species in modern times. With the rest of us, they see the various types reproducing "after their kind." Neither do they find in paleontology any trace of transformism. Hence, in their dilemma, they have invented the idea of a genealogical tree, with its diverging branches. This device enables them to go back far enough in time to indulge in various kinds of speculation, and to feel secure in the belief that no one can absolutely prove them to be mistaken. However, in spite of their assurance, we venture to suggest that their theories are speculation run wild.

Evolution and Deterioration

A recent booklet, entitled *Evolution Made Plain,* says that evolution does not teach that every living thing is becoming better and better. "On the contrary," says the author, "it shows that many species deteriorate, are driven to the wall, and become extinct, while only the best fitted survive."

This is a mistaken claim. It is not evolution that reveals these patent facts; it is common-sense observation. The facts may be plainly seen even if no evolution theory were in vogue. Scientific research, no matter by whom carried on, has proven that many species of animals, once living upon the earth, have perished, leaving only their

fossil remains to tell the story. It is wrong to make such unwarranted claims for evolution.

How and why these ancient species of animals perished, neither evolution nor empirical science can tell us. No real evidence exists to warrant the assertion that they "were driven to the wall" and exterminated by other species better fitted to survive. That theory is only a guess, like so many guesses of these conjecture-ridden days. Those ancient creatures may have perished through naturally destructive causes. Surely the elephants found imbedded in the ice of the polar regions, with their flesh kept fresh for ages in cold storage, were not destroyed by other animals more powerful than they; for in that case their flesh would have been devoured.

Indeed, there is strong evidence of a great cataclysm in the history of our earth that destroyed many kinds of creatures suddenly. In many localities their remains are found heaped together in large numbers, proving that they were seeking safety, but were overtaken by sudden disaster. Even fresh, undigested grass has been found in the stomachs of animals imbedded centuries ago in the ice of northern Siberia. How are we to interpret such outstanding facts? Surely not by the long-drawn struggle for existence and the survival of the fittest.

A most serious count against evolution is the fact that many of the species of extinct animals, like the mastodons and some of the dinosaurs, were much larger and stronger than are the animals of the same types to-day.[6] Could

[6] The recent finds of Dr. Osborn and his party in the Gobi Desert, Mongolia, China, are indeed very interesting. Many fossil remains of dinosaurs—animals now extinct—were discovered, and for the first time some eggs of these creatures were found. But these discoveries afford no proof of transformism. The fossils show that those ancient animals were just as complete and complex in their organization as are their successors to-day. They were also much larger and much more powerful.

the smaller species which have survived to the present time have killed off those powerful beasts of the geological yesterday? Compare the small lizards of to-day with their immense predecessors of bygone ages. No; the theory of the struggle for existence, with its correlate, the survival of the fittest, explains little, if anything, of the history of life on our earth. It is an inadequate hypothesis.

As a matter of fact, so-called "official science" has quite often been mistaken. In a recent French summary of scientific investigations occurs this paragraph:

> The history of all science warns us that the simplest theories have been rejected *a priori* as being incompatible with science. Medical anæsthesia was denied by Majendie. The action of microbes was contested for twenty years by all the scientists of all the academies. Bouillaud declared that the telephone was but ventriloquism. Lavoisier said that stones cannot fall from the sky, for there are no stones in the sky. The circulation of the blood was only admitted after forty years of sterile discussion. In a lecture in 1827 at the Academy of Sciences Girard asserted it to be folly to suppose that water could be led to the upper floors of houses by pipes. In 1840 J. Mueller declared that the speed of nerve impulse could never be measured.[7]

The eggs, too, were just as perfect as are any eggs found to-day, just as fully organized for all procreative purposes. The fossils of mosquitoes were also found, and those ancient insect pests were just as competent to do business as are our modern, up-to-date mosquitoes. The extinct animals and insects, therefore, fail to bear favorable witness to the theory of evolution.

[7] The author regrets that he has mislaid the authority for this important paragraph, but he distinctly remembers that he was entirely satisfied with its reliability when he copied it.

Some remarks that are apt and apropos from that acute scientist and reasoner, Dr. Louis Trenchard More,[8] will bring our chapter on shifting science to a conclusion: "Or do men of science recognize that they are living in glass houses and that it is dangerous to throw stones? When they scoff at philosophy and religion because of seventy-odd jarring sects which cannot agree, they forget their own inability to solve the nature of matter and energy, and that the pathway of science is strewn with the wrecks of cherished hypotheses." Then he cites a number of notable examples of the kaleidoscopic phases of science which need not be repeated here.

[8] See his notable work, *The Dogma of Evolution,* pp. 352, 353.

CHAPTER XI

HOMOLOGIES AND OTHER DATA

How Men and Monkeys Differ

Nowadays much is made of homologies—that is, of the physical parallelisms between man and his supposed relatives of the simian tribes. We have already dealt at some length with this subject, and have tried to impress upon the reader's mind the reasonableness of the conclusion that these resemblances may simply be marks of the unity of the Creator's plan. He made a universe of much diversity, it is true; yet, on the supposition that He meant to have a real universe, all organisms had to be cast pretty much in the same mold. Had men been constituted utterly unlike the natural world around him, he would not have been "at home" in his environment; he would have been an alien and a misfit. There is just enough diversity in the cosmos to make it continuously interesting, and at the same time enough unity to constitute it a universe.

But, to our mind, the fact of homologies has been overworked by the transformists, while some vital differentiating data have either been ignored or too little stressed. Instead of perpetually looking for parallelisms, why not make an honest effort to discern the striking differences between men and animals? Let us suggest a few of them.

Men are self-conscious beings, able to say "I," and to know what they mean by it. No animal can say "I"; hence no one can assert that animals have self-conscious-

ness. We do know, however, that man has, because he can talk about it. Man can reason. He can draw logical conclusions from given premises. Animals have no such ability. They have an instinct by which they can adapt themselves to their surroundings and conditions, but that is far from an endowment worthy to be called a rational faculty. Men can construct languages, built upon grammatical principles. Even the pagan tribes of darkest Africa have languages that are so constructed.[1] Man has a mathematical mind, with which he can solve the most intricate problems, even to figuring out the exact time of an eclipse many years before it occurs. What animal can do these things?

Moreover, man's mind is capable of continued progress as long as life and strength endure. The brute mind can go just so far and then must stop. In the natural state animals make no progress in intelligence.

But man has still higher faculties—he has conscience, which enables him to distinguish between right and wrong; he has free will, enabling him to choose between alternatives, whether in the natural or the moral sphere. Such faculties are unknown in the animal world. Most of all, man has a spiritual faculty with which he apprehends God, communes with Him, makes His will his standard, and looks forward with joy to a destiny of eternal fellowship with Him. But in monkeyland there is no sense of these uplifting truths and realities. The contrasts are therefore essential and eternal; the parallelisms are incidental and temporary.

Even when we compare man's bodily organism with that of animals, there are many marked and striking contrasts. Man naturally stands and walks uprightly. Only by a strained effort can he go in any other way. The ani-

[1] See Alexander LeRoy, *The Religion of the Primitives.*

mals nearest him naturally go on all fours. Some of them can assume the upright position for a time, but it is not their natural posture. Watch a bevy of monkeys running from danger, and you will see them galloping along on their four feet.

Compare the hands of man with those of monkeys or the forefeet of any other animal, and note the differences. The monkey's hands are made specifically for climbing, while those of man are not well adapted for that purpose. They are, however, constructed for all kinds of skillful mechanical functions. It has been truly said that, if man's hand had been constructed like that of the monkey or the ape, a high civilization would have been impossible, because then he could have developed no mechanical genius. And the significant fact is that the earliest—or what are believed to be the earliest—fossil remains of men that have been found show that they had fully developed human hands, while no intermediate forms, part human and part monkey, have been discovered. Here is indeed a vital difference between man and the simians; it is one on which many truly human facts are absolutely dependent; it is not a mere trifling or incidental difference.

Next consider man's foot. It is admirably adapted for upright walking, but is a very poor arrangement for going on all fours. It is also worth little for climbing purposes. On the other hand, the monkey's foot is specifically made for clambering among the trees, for holding on to the branches, and scaling the boles, while it is rather a poor shift for locomotion on the ground. Here again is a most vital dissimilarity.

It is difficult to see how the monkey's hind palm and digits could have ever evolved into the foot of a man, which is fitted for so different a purpose. Nor is it reasonable to assume that, if man was once an expert tree-

climber, he would ever have abandoned his arboreal habits, seeing that they would have been of great value to him in escaping from dangerous land animals. What could it have been, anyway, that drove him down from the trees and converted him into a terrestrial being?

Man's skeletal, tendinous, and muscular mechanism all combine to give him the upright position. He also has the necessary physiological functioning powers and the anatomical apparatus for balancing himself when he stands and walks, so that he automatically preserves his equilibrium. To go on his hands and feet as the monkeys do is unnatural and laborious for him. In this respect again the differentiation is as striking as it is essential. If man had been made a four-legged creature, moving along horizontally like animals, it is difficult to see how he could have become highly civilized and cultured. Evidently he was specifically created and fashioned for the very place he occupies in the world.

Made upright, he can feel that he was created in the divine image. His head and eyes are so related to the rest of his body that he can readily look down upon the ground to watch his footsteps and to view the realm of nature below him. At the same time he can look about him horizontally, and greet his fellowmen as his equals and comrades. For this cause, too, he can view nature laterally and this helps him to interpret her phenomena. Most of all, man's upright position enables him easily to lift his eyes up to the vast universe that God has made for his home, delight and wonder and to God who is greater than the universe. Note that man can cast his vision toward the transcendent God in no other way than by looking up from the earth. He must also lift the eyes of his soul upward in order to worship the true and living God. Thus he is so formed corporeally that he need

not be a groundling, if he will look upward beyond material things.

Is it not also true that man's upright position confers upon him a dignity that he could not otherwise maintain? Suppose, for example, he were compelled all his life to stand and move horizontally, how could he regard himself as belonging to a special genus? The very fact that he stands upright marks him as the special creation of God, made for a purpose very different from that of the vegetable and animal kingdoms. Moreover, uprightness of physical posture suggests uprightness of character, and therefore incites man to keep himself above the plane of mere animal life.

There is, furthermore, a significant difference between man's physiognomy and that of the beasts. Note the variety of expression on man's countenance. He can display any kind of emotion, even though he may not open his lips in speech. He can weep and rejoice. If he uses his will, he can keep his face immobile in times of great stress of feeling. How different from the "wooden" expression on the face of an animal. A monkey in a cage may perform all kinds of pranks yet his countenance remains expressionless. In some cases there may be a gleam in the eye, but often even that organ remains lack-luster.

Thus we have shown that a wide gulf separates man from the animals. Man has moral and spiritual powers that put him in a genus all his own. His body bears the insignia of a higher nature than that of his brute neighbors. He has mental concepts, emotions, desires and ideals that they know nothing about. All these facts proclaim him to have been created and designed by the Almighty for a noble purpose. These differences are so deep, so elemental, so structural, that it is unreasonable

to assume that such a being as man could have been evolved from a bestial stock. The doctrine of special creation in the divine image best explains why man is of so superior a mold and character.

How a Brain was Evolved

"We are all descended from a simple, wormlike creature," says Professor D. W. La Rue. "The segments of our backbone are memorials of the segments of his body." [2]

Let us follow and analyze the author's method of reasoning. He then proceeds to say that at first the segments of our ancestral worm's body were largely independent, each having its own nerve arc and ganglion.

> But such a creature has to move; and it is not round like a jelly-fish, and so it cannot strike off indifferently in any direction; it has ends, and one of these ends must go first. Since the creature is moving largely to find food, it is natural that the mouth end should go first. Now, this roaming mouth needs the best guidance possible. What better place for the senses of taste, smell, hearing and sight, than the region round the mouth?

Let us see whether it is reasonable to believe that evolution could have developed the creature thus far. It had two ends, says our author. How could a creature with ends evolve from a creature without ends? What caused the round jellyfish to lose its rotundity and develop into

[2] *Psychology for Teachers,* p. 32. This book is intended as a textbook in our public, tax-supported schools, and inculcates evolution in the usual cocksure style.

a creature of oblong form? There are jellyfishes to-day. No scientist has ever known one of them to become anything but a jellyfish or to procreate anything but jellyfishes. Yet jellyfishes have been known for thousands of years. So where is the scientific proof of the evolution of a higher type of animal from the jellyfish?

This worm-like creature had two ends. How he got them no one knows. At one end it had a mouth, a "roaming mouth." But how did it get its mouth? If it lived previously without a mouth, it did not need a mouth; therefore evolution had no reason for evolving a mouth. But the primary question is, How could the mouth ever have gotten started? And when it was started "just a little bit," of what use would it have been? None. Therefore evolution would have had no reason to develop the incipient organ further. It would have been more than useless; it would have been an encumbrance.

However, that "roaming mouth" needed "the best guidance possible." Therefore "the mouth end" of the creature had to have the various senses of taste, smell, hearing and sight. But here is a still greater sphinx's riddle: How could these marvelous senses have been evolved? For instance, eyes were needed for sight. There is no possible way by which so complex and marvelous a mechanism as an eye can be developed by fortuitous natural causes! Moreover, the eye is an organ that must be complete before it can be of use for seeing. Thus, during the long ages in which it would have been evolving, it would have been useless; for which reason evolution itself should have eliminated it as encumbering baggage. The same would have been true of the palate, the nostrils, and the ears. All of them in their incipiency would have been useless lumber.

But this creature could not get along without a brain.

So how does evolution set about to produce that much-needed organ? The author explains the process in this way:

> But every one of these sense organs must be connected with every muscle of the body. If, for example, the eye reports food in front of the animal, a nerve thrill must pass from that eye to every body-moving muscle to insure full speed ahead. And there must be an equally widespread distribution of nerve impulses to secure united action of all muscles in beating a retreat. Now, all this means multiplication of connections, of nerve fibers, and, as we should expect, most of them appear in the most convenient place, near the sense organs, in the head. So begins the brain.
>
> Thus there come to be grouped about the bony-armored head the mouth, the special sense organs, and the brain. To sum up; the mouth end of the animal not only *goes* ahead, but *grows* a head, with a brain in it, and set round with the most delicate and precious sense organs.

All this is very wonderful. The mouth end of the creature goes ahead without a brain, and so develops a brain in order that it can go ahead! Which came first—the going ahead or the brain? If the creature could go ahead without a brain, why did it need a brain? If it needed a brain in order to go ahead, then the brain must have been there before it went ahead, and therefore the brain could not have been evolved by the animal's going ahead. This wonderful creature, a worm, man's remote ancestor, could not go ahead without a brain, and yet by going ahead it evolved a brain!

In the next paragraph our author says: "The brain is the master ganglion of the body, the chief member of the most important bodily system, the governing system, the steering system."

Then if this prehistoric worm had to have a brain to enable it to function, how did it function before the brain was evolved? Just think the matter through from the scientific viewpoint: The previously named animal must have had its complete outfit of mouth, nerves, ganglions and brain before it could have functioned at all. Had any of them been missing, it could not have done business. Therefore it could not have been evolved by a slow process. It must have been planned and given its full equipment by its Creator, which proposition is further proved by the fact that it has never been known to reproduce anything but animals of its own peculiar kind. And that fact accords with the Bible, but disproves evolution.

More Notes on Transformism

To the problem of the transformation of species we herewith add a few pertinent quotations to show that we are not alone in our doubts regarding it.

A keen writer is D. A. Sommer, who has recently issued a valuable booklet, with the title, *Science and Supposition in Evolution, Geology and Astronomy.* Note this: "Even the little moneron, the one-celled creature in the bottom of the sea, from which they say man started a hundred millions years ago—even he, in all his littleness and lack of 'useful modifications,' is still here, and his very existence is fatal to the theory of the survival of the fittest, the foundation stone of the theory of evolution." [3]

[3] P. 9.

The following quotation is from Le Conte:

"The study of species, as they now are, would probably not suggest, certainly could not prove, the theory of their origin by derivation or transmutation." [4] That is just the point for which we have contended again and again—that when we study nature as she now is, we find no proof of the transmutation theory. To turn back a million years, and say evolution took place then, is simply to beg the question. If evolution occurred in nature then, nature must have functioned differently then from what she does now. In that case what becomes of "the law of uniformity," on which the evolutionists so stoutly insist? Nature, they hold, has always carried on her processes as she does now. If that were so, we ought to see non-living matter evolving into living matter all around us. We ought also to see species of plants and animals evolving into new and higher forms. But we certainly do not see these processes carried on in the natural realm to-day. Yet some time in the past life and species must have started. Professor G. M. Price puts the facts well when he says:

> Some organisms must have been called into existence in a way different from any process that we now call a natural process. [Also] Matter and life and the various distinct kinds of life must have been brought into existence at some time in the past through a process wholly different, both in the degree and the kind of power exerted, from any process now going on around us which we call a natural process.

The only alternative to gradual development that we know anything about is creation.

[4] *Compend of Geology*, p. 111.

That branch of biology which deals with the individual cell, its structure and processes, is called cytology. Of course, it is closely connected with embryology, which treats of the development of the embryos of plants and animals from the egg stage to the birth of the new individual. Histology deals with the development of the cells into the various tissues of the animal body. These are wonderful subjects, and the study of them is most interesting. And here is a significant fact relative to cells, which are known as the units of life. All cells reproduce after their kind—except one species, and this exception is most remarkable. The exception is the reproductive cells. When the sperm of the male and the ovum of the female come into the proper conjunction and are permitted to develop, they will produce all the diverse cells of the body, those that form bone, muscle, blood, tendons, and all the rest, even the little unicellular corpuscles that swim about in the blood and feed on bacteria. Yet after the first cells of each species have been brought forth by the procreative cells, all of them multiply after their kind. Even the amœbæ in the blood give birth only to other amœbæ. How suggestive of intelligent design in creation! Nothing more clearly shows the hand of God. The fecundity of the procreative cells makes the various organisms of the world possible, while the other cells insure the stability and certainty of type, thus giving us a cosmos, a world of organic and genetic law and order.

On the permanence of species Dr. Bullinger offers these pointed remarks:

> All the eggs of birds are identical in their chemical composition; and yet each egg produces its own species without any variation. Each species has its

> own identical habits and instincts, differing from those of other species. A duck hatched by a hen will, on coming out of its shell, seek the water, of which it can have had no previous experience, while the hen dare not follow. . . . The crab-apple and the vine may grow close together from the very same soil. Their roots may intertwine; they may have the same air, the same showers, the same sun; but the one will be sour and the other sweet. Their difference is seen to be permanent.[5]

How to Prove Transformism

The only way to prove the truth or non-truth of evolution is to go to nature in the raw and study her first-hand. Penetrate to central Africa, where no human intelligence has ever touched nature, and see whether you find signs of progress there. Do any of the plants, insects, reptiles, birds and animals develop into higher or different forms, or afford any evidence that they ever have had such a predilection? In all the history of the world has a wilderness ever developed by native forces into a garden? Has it ever even displayed any tendency to become garden-like? There is not an iota of evidence that it has. The wilderness remains a wilderness until human intelligence touches and transforms it.

Since there is no mark of progressiveness in nature's realm when left to herself, it is evident that nature never could have produced man. The only circumstances in which nature is known to make progress are those in which man with his intelligence and free will lays hold upon her and pushes her upward. Therefore, we repeat, nature never could have brought man into being.

[5] *The Fallacies of Evolution.*

Suppose we go again to central Africa. Do the native tribes, when left to themselves, make progress from a lower to a higher status? Has any ethnologist ever known an animistic tribe to develop into monotheistic belief by means of inherent forces? Have the scientists ever known a pagan tribe to become Christian by natural development? Not one. In every case of improvement a power from outside the tribe has touched its life.[6]

But why does man in certain circumstances make progress while nature does not? The only adequate answer is, man was created an intelligent being in the image of his Maker, and therefore was constituted by Him with the capacity for making progress. God brought nature to a certain status, and then told man, whom He had created in His own image, to "complete and subdue" the earth.[7]

Is that a scientific doctrine? It surely is; it agrees with the facts as we know them. We know that nature stands still until man comes along and subdues and improves her. The biblical cosmogony agrees perfectly with observed data; therefore it is scientific.[8]

Another fact supports the biblical view. Some months ago the author asked a missionary, who had lately come from his field of service in central Africa, where he had been working with pagan tribes—some of which had never before been touched by Christianity and civilization—whether any of them had any tradition or belief that they had evolved from animals like the monkey races about them. He replied promptly, "No! they would be highly insulted if you suggested such a thing!" This is significant. All tribes, no matter how low in the scale,

[6] See Alexander Le Roy, *The Religion of the Primitives.*
[7] Gen. i.27, 28.
[8] See George B. O'Toole, *The Case Against Evolution.*

have some sort of religion and ethics. Nearly all of them, if not all, have some kind of tradition, however dim it may be, that they were brought into existence by the gods and that they in some respects bear their image. This tradition is most significant. It may surely be interpreted as an inheritance from the original creation according to Genesis, although it has been greatly dimmed and corrupted through the ages. If this does not explain the tradition, what will? If men were the descendants of the simian tribes, or came from the same primate stock, there surely ought to be some kind of a tradition about it among the pagan nations.

Should it be said that the Hindu doctrine of transmigration might be brought forward as a proof of man's animal ancestry, we would reply that the reincarnation of a human soul in an animal form is ever regarded in the Hindu religion as a degradation, a fall, and never as a mark of advancement. Hence this doctrine furnishes an argument against evolution rather than for it.

CHAPTER XII

A CRITIQUE ON A RECENT WORK ON EVOLUTION

The Right to Pass Judgment

Sometimes it is said that only the specialist in physical science has a right to form an opinion or pronounce a judgment on the theory of evolution. In a recent brochure, Professor Raymond C. Osburn, of the Ohio State University, says: "An educated man should at least be able to draw the line between what he knows and what he doesn't know, and not attempt to pass judgment on matters outside of his field of training. An educated man without scientific training has no more basis for forming a proper judgment of the law of evolution than of the Einstein theory of Relativity."

If the Christian theologian is to be forbidden to venture upon scientific ground because it is an exclusive reservation, he might say, in turn and with equal right, to the physical scientist: "You must stay out of my domain. You are not a technically trained theologian. You expose your lack of such training almost every time you open your mouth or put your pen to paper on religious subjects."

Yet many evolutionists do enter the territory of religion, and even venture to pronounce judgment upon its tenets and to read our trained exegetical scholars some lessons in biblical interpretation. We shall cite some outstanding examples to prove this statement.

In 1923 Dr. Conklin issued a brochure entitled, *Evolution and the Bible.*[1] Dr. W. W. Keen, a scientist and a surgeon (not a theologian), issued a book recently with the title, *I Believe in God and in Evolution,* in which he gave the preachers some advice, and even ventured to instruct the technical Semitic scholars of our day how to interpret the languages of the Orient; and in doing so, he committed some humiliating errors. Professor Raymond C. Osburn, of the Department of Zoölogy in the Ohio State University, published a tract on *Some Misconceptions of Evolution,* in which he also made excursions into the field of religion and biblical interpretation. A new book by Henry Fairfield Osborn comes to hand, with the title, *Evolution and Religion,* which is an attempt to deal with both, and pronounce judgment on fundamental theological doctrines. Another recent book is entitled, *Where Evolution and Religion Meet,* by Professors John M. and Merle C. Coulter, of the Department of Botany in the University of Chicago. In recent years Mr. H. G. Wells has made many a sally of a more or less sensational character into the realm of religion. The leading article recently in a magazine for preachers [2] was by Professor J. Arthur Thomson, who essayed to speak with not a little assurance on the subject of the relation between religion and science. Still more recently a book has come from his pen entitled *Science and Religion.* Hendrik Willem Van Loon has ventured to write what he calls *The Story of the Bible.* A somewhat notable English book, *Religion and Biology,* is written by Professor Ernest E. Unwin, M.Sc., who is not a theologian, but a science master. We have already mentioned Professor H. H. Lane's *Evolution and Christian Faith,* and have

[1] Discussed in Chap. VII of this volume.
[2] *The Homiletic Monthly,* Jan., 1924.

pointed out some of its defects. Dr. Osborn has written another book, *The Earth Speaks To Bryan,* in which he pronounces judgment on a number of theological doctrines.

Thus it is seen that some of the physical scientists consider themselves competent to enter the field of religion and discuss its profound problems. Do we resent their doing so? Do we call them intruders and trespassers? Indeed, no! They are welcome, especially if they prove themselves capable of dealing intelligently with these subjects. It would be narrow and presumptuous for theologians to put up a sign, "No trespassing on these premises!" We believe that all realms of human investigation ought to be open and free to all thinkers; only let them first do their research work well, and give their conclusions publicity only after they have made sufficient investigation. Therefore we hold that, as we do not say *Verboten* to the scientist who wishes to enter the field of theology, he should be generous and courteous enough to accord us the same right when we venture into the domain of science.

The fact is, as some one has said, the bane of our day is overspecialization. So many men confine their investigations to only one restricted section of nature or thought, and then try to impose upon their fellowmen a world-philosophy based on their limited data and viewpoint. It is impossible to formulate a world-view of real value in that way. To be classed as men of broad vision, all facts, as far as possible, must be taken into account. There is a beautiful sisterhood of all the sciences. Let us not segregate any of them; let us correlate them; then only are we ready to construct an adequate world-view.

With the foregoing facts in mind, we feel justified in reviewing and criticizing one of the latest and most

authentic books on the side of evolution. Its title is, *The Evolution of Man.* It contains chapters by the following scientists: Professors Richard Swann Lull, Harry Burr Ferris, George Howard Parker, James Rowland Angell, Albert Galloway Keller, and Edwin Grant Conklin. Of these, Lull, Parker, Ferris and Keller are professors in Yale University; Angell is president of that institution; Conklin is professor of biology in Princeton University. The book was issued in the fall of 1922, and the lectures which it comprises were delivered during the academic year of 1921-1922 at Yale University.

The first word to say of the book is, that it is written in a noncontroversial style. Little attempt is made to answer the objections of those who do not accept evolution. Indeed, they are treated for the most part as if they were nonexistent. As a rule, the positive side of evolution is stated in a positive way; while, we are glad to say, some difficulties in the way of belief in evolution are frankly and honestly conceded. There is, of course, the general assumption throughout the work that everybody who is competent to form a judgment believes in evolution; yet no epithets are bandied, and no one is abused. All objectors are simply ignored.

Thus we may conclude that in this book the evolutionists have put forth their best effort. Everywhere there is evidence of technical training in physical science; yet there is nothing that the person who has himself devoted some study to the technique and principles of science cannot understand. The first half of the book contains a number of illustrations that help to elucidate the text.

Our second word is this: The treatment of the subject is wholly naturalistic. The origin of life, sentiency, personality, and mentality are all accounted for by purely natural processes of development. There is not a single

reference to supernatural agency (unless there is an obscure hint on page 42).[3] The name of God does not occur in the book; there is not the remotest acknowledgment of His existence. So far as the deponents in this book have any witness to bear, man came to be what he is, body and mind, without an intelligent and purposeful cause. If the authors believe in a personal God, or any other kind of a God, they give no sign.

It is true, Professor Lull refers to "the Mosaic account of creation," which, he says, "would give us a very recent date for man's advent on this planet."[4] Then in a mildly derisive way, he calls attention to Dr. John Lightfoot's calculations regarding biblical chronology away back in 1654—a chronology that nobody to-day accepts. Is this ancient citation made at all in order to cast discredit on the biblical account and on biblical believers and scholars? Later, strangely enough, he adds: "One questions, however, not the scriptural account, but the exactness of the interpretation. The researches of oriental scholars are bringing more and more into existence the historical truth of the Old Testament narratives, and are establishing from other lines of evidence the historical character of Abraham, Isaac, Jacob and other Hebrew patriarchs; but they are also tracing back into a more remote period the history of the Near Eastern people, . . ."[5] Here you find either ambiguity of statement, or else a direct contradiction between the first and the last statements cited.

President Angell says: "Even in the field of religion, where obvious evolution has occurred since primitive times, the modern mind has introduced modifications of

[3] "It may be possible to explain many of the processes of life on the mechanistic or physico-chemical basis, but it is difficult to explain reproduction on that theory."

[4] *The Evolution of Man*, p. 1. [5] *Ibid.*, p. 1.

the teachings of the founders of the great world religions, designed to adapt them more nearly to the conditions of contemporary life. The doctrines of Christianity, while based as truly as ever on the life and teachings of Jesus, are undergoing constant development and transformation to accommodate them to the needs of the life and thought of our time." [6]

Professor Keller refers to the parabolic teaching of Christ in what seems to us a rather disparaging context.[7] In his chapter on "Societal Evolution" he speaks about "mores" and religion a few times, but accounts for them solely by natural evolution, never once hinting at any theistic ground or cause. "Mores" (the Latin for morals) are only "customs," and the reformer who would change the natural order is called "a tinkerer." The work, therefore, is throughout purely naturalistic.

Now, in all sincerity we would ask whether Christian people, scientific or nonscientific, dare have nothing to say in respect to these speculations of the naturalists? A theory that assigns to man a purely natural and animal origin surely runs counter to the teaching of Christianity. Indeed, the two could not very well be more at variance. Moreover, the whole view of man, his nature, purpose, and destiny, as set forth in the Bible, is the very opposite of that taught by these evolutionists. We are saying this in order that men who promulgate such doctrines as scientifically established facts may not be so much surprised when Christian thinkers and scholars who enter the arena against them want to be absolutely assured that evolution has been scientifically validated before they give up the teaching of the Bible, which has brought them so rich an experience of pardon, truth and salvation.

[6] *The Evolution of Man*, p. 123. [7] *Ibid.*, p. 129.

Man's Animal Lineage

All the scientists represented in this volume assign to man an animal ancestry, and that, too, for both body and mind. This is full-fledged evolution; not the callow or half-fledged kind advocated by some liberalistic preachers and theologians. Man is a blue-blooded descendant of an animal stock still farther down in the scale than the anthropoid ape, the orang, the gorilla and the gibbon.[8] We shall make good our assertion by citations.

Professor Lull speaks of man's "prehuman forebears," [9] and indicates that they once lived in "the trees." According to the diagram mentioned above, *homo sapiens* grew out of the same trunk as the anthropoid apes. Professor Ferris says: "Because of the structural similarities he [man] belongs to the order of primates, together with the lemurs, monkeys, and apes." Again: "Structurally man differs from his nearest relatives, the anthropoid apes, by differences of degree rather than of kind." [10]

Again we are told:

> It is pretty well agreed that the anthropoid apes and man came from a common ancestor, and he in turn from some primitive broad-nosed ape. Some believe that the mammals were evolved from a primitive reptilian form. Others say that they came from the amphibians, which in turn evolved from a fish form, the latter from an invertebrate, and so on down to the protozoa. Evolution must likewise assume that under some favorable condition the earliest living forms were evolved from the inorganic world. Whether such a process is going on at present no one

[8] *Ibid.* See diagram, p. 36.
[9] *Ibid.*, p. 5.
[10] *Ibid.*, p. 39.

knows. However, the facts of man's development, structure and variations, which have been given above, certainly can be best explained on the basis of man's descent from lower forms; and human fossils, as far as they go, as is shown in the previous chapter, definitely lead back toward a form from which both apes and man may have descended.[11]

President Angell contributes the chapter on "The Evolution of Intelligence." On coming to this section, we cherished the hope of better things, but his essay moves along the same naturalistic lines as the others. There is no hint that man's mind might have been created in the image of God. Indeed, no sign of any recognition of the divine existence is apparent. The chapter begins in this way: "It may be assumed without argument that evolution has actually occurred within the field of intelligence, as it has within the field of organic structure, and I shall proceed at once to examine the major features of the process." And further on he declares that he does not intend "to postulate any fundamental difference between human and animal intelligence." He evidently takes the side of those who deny that any "primitive intelligence" has directed the evolutionary process.[12] Behavior is "essentially a function of structure, reflexes, instincts, and tropisms simply represent accidental variations which have survived. . . . As things now stand, acts of reflex and instinctive character, whatever their evolutionary history, are as such intrinsically nonintelligent, nonadaptive to variation in environment. This is as true of man as of animals."

To indicate still further his line of thought, in discussing the various opinions held by scientists concerning

[11] *Ibid.*, pp. 78, 79. [12] *Ibid.*, p. 107.

consciousness in animals, he says: "One must, of course, admit that we have no direct access to animal consciousness, if such exists, but the same thing is true of one's human neighbor." [13] Does not this display lack of insight! Our human neighbor can tell us plainly that he is conscious and self-conscious, that he is aware of himself and of the objects and persons around him; but the animal can do nothing of the kind.

There is one concession which we must frankly cite: "Primitive man as we know him, although often carrying on his affairs with an extremely limited vocabulary, nevertheless is able, through his language devices—to say nothing of others—to mark off and deal with abstract and general relations, and in so far he enjoys a technical superiority to animals which, in effect, is a difference in kind as well as a difference in degree." [14]

The next few paragraphs point out in several unimportant ways the difference between human and animal intelligence; but there is no reference to man's moral and spiritual nature, his high hopes and aspirations, his communion with God, as marks of his superiority to animals. Here we also hoped to find some reference to a supernatural origin of man's rational intelligence—but not a word; it is partly accounted for on the basis of man's finer brain organization; he has "a very much more delicate internal structure in the cortex, the frontal areas and the so-called association areas (of the brain) are relatively very large." Still he admits that these differences in the structure and size of the brain and the nervous system are hardly sufficient to account for the "marked differences" between the intelligence of man and "even the most highly developed animal."

But here he drops the matter, and gives no reason for

[13] *Ibid.*, p. 113. [14] *Ibid.*, p. 118.

this "marked difference." If evolution cannot furnish the adequate explanation, why not admit it frankly, and at least concede that some other cause must be invoked? He speaks of "the primeval slime out of which organic life has come," [15] and the context indicates that man came up from that "primeval slime." Man is "in his instinctive life close cousin to the brutes." "He has also in his nature the deep-grounded tendencies of hundreds of thousands of generations of savage human ancestors." But that man has an ethical and spiritual nature—of that outstanding and paramount fact no cognizance is taken in this essay.

In the next chapter, "Societal Evolution," Professor Keller takes the same position in regard to man's bestial origin. Of evolution he says: "No informed person feels any longer the need of arguing the truth of the theory." [16] Again he says: "My predecessors in this course of lectures have shown that the evolutionary process does not stop short of man as an animal." [17] Also: "Over all the earth he is pretty much the same sort of animal." [18]

The last lecture of this series, "The Trend of Evolution," by Professor Edwin Grant Conklin, of Princeton University, moves on the same earthly plane of thought. In beginning his essay, he refers to "the Olympian gods" and to the "modern movie," but that is as high as he gets. The God of Natural or Christian Theism receives no recognition. Note his basal conception of the origin of things: "What merely human intellect could have foreseen, in those earliest protoplasmic particles, 'the promise and potency of all life,' the million species of animals and plants, the monsters of the deep, the giant saurians, the mighty beasts, and finally man?" There are more inter-

[15] *Ibid.*, p. 122.
[16] *Ibid.*, p. 126.
[17] *Ibid.*, p. 131.
[18] *Ibid.*, p. 132.

rogations of the same grade. On the next page he implies that man, like all other living things, came from "the original amœba." [19]

Just to show how far he is from lifting "up his eyes unto Jehovah, the Creator of the heavens and the earth," we cite here the "causes" which he assigns for the whole evolutionary process from protoplasmic slime and the original amœba up to man: "Unfortunately our knowledge of the causes of evolution is not very complete, but the majority of biologists agree that inherited variations, or mutations, constitute the building materials of evolution, while natural selection, or the elimination of the unfit, is the workman or architect that selects or rejects these materials." [20] Again: "It is probably fortunate that men are not charged with the duty of directing future evolution, and we can only hope that nature, which has directed progressive evolution from amœba to man without human guidance, may work still greater wonders in future ages."

This essay contains a long discussion of the uncertainties in predicting the outcome of the evolutionary process, and concludes with the following statement as to the result of all scientific investigation and thought: "We cannot see clearly the next scene; we can scarcely imagine the next act, and the end of the great drama of evolution, if there is to be an end, is a matter of faith alone." [21]

Conjectural Aspects of the Theory

Thus far we have simply aimed to report the general character of the evolutionary hypothesis in the hands of

[19] *Ibid.*, p. 153.

[20] *Ibid.*, p. 154. Only a superficial mode of thinking would lead one to call "inherited variations" the "building material" and "natural selection" "the workman." These are terms that stand for merely a condition, a law, a *modus operandi;* not an entity, cause or force.

[21] *Ibid.*, pp. 182, 184.

its scientific exponents. We are wondering whether it would not be well for Christian preachers and theologians to walk warily before they enter into close fellowship with the evolutionists and become their partners in propagating this theory in the world. Here are five foremost naturalists who try to account for all phenomena in the natural and human world by the action of merely resident and natural forces. A previous book, issued by the Yale University Press and written by five Yale University professors, was of the same character.[22] Are Christians going to join the materialistic school? Can the theory of evolution be Christianized? Can it be harmonized with the Christian Scriptures, which must ever be the norm of authority for Christian people?

However, if evolution were really proven by the findings of natural science, all of us would, we hope, be honest and truth-loving enough to abide by the result. But it would be better and wiser to wait until the theory is placed on an empirical basis; it will be time enough then to see whether it can be adjusted to Christian doctrine. At present we do not see how the theory can be harmonized with the teaching of the Bible, honestly interpreted as it reads. However, we do not feel strongly impelled to attempt such a reconciliation as long as evolution rests only on a conjectural or hypothetical basis, and especially as long as so many outstanding facts seem to be against it.

In order once more to make good our assertion that the theory of evolution has not been empirically established, we shall proceed to analyze the processes of reasoning and induction employed in the book before us.

We shall begin with Professor Lull's chapter on "The Antiquity of Man," the first in the book, which sets forth

[22] *The Evolution of the Earth and Its Inhabitants,* by Professors Barrell, Schuchert, Woodruff, Lull and Huntington, all of Yale University.

"the paleontological evidence for the evolution of man." In order to prove man's antiquity, Professor Lull refers to several tablets, one of them at present in the Yale Babylonian Collection, which he holds to be "the oldest human documents thus far discovered." We have no occasion to dispute his statements. These Babylonian tablets, says our author, antedate Christ by some five thousand five hundred or six thousand years. Yet they are evidence that men no longer made their records in ideographs or picture-writing, but had advanced to inscriptive writing. This proves, he says, that their authors had "progressed far along the evolutionary pathway . . ."

Here evolution is simply taken for granted; but it is the very proposition to be proved; thus here we have an example of the *hysteron proteron.* Our author thinks that the evolution from picture-writing to inscriptive writing was "a centuries-long process." But that may also be a *non sequitur;* for, if man was originally constituted a rational being by his Creator, the progress referred to would not have needed to take very long. In the course of human history there are many instances of rapid progress. Especially when all the world was new, and so many discoveries were just at hand, advancement would naturally have been quite rapid. Why not look to higher sources for our interpretation of man instead of forever peering down at the poor ape? Our scientist also contends that even the protoscript (the very first writing) could have been invented only "by people of considerable intellectual powers who had long since emerged from savagery . . ." Here again occurs the same fallacy, that of taking the evolutionary theory for granted, while it is the very foundation of the argument.

The writer then passes on to consider "the implements and weapons of vanished people, with their varying de-

grees of refinement." Here we have a discussion of the Eolithic, Paleolithic, and Neolithic periods. We are pleased that the author so frankly admits cases of doubt and of difference of opinion among the scientists. For example, with respect to the eoliths, the oldest of these implements, he states that there are scientific authorities who deny that they are of human workmanship, but "invoke the physical forces of nature to account for their seeming." But do not the scientists realize that this difference of opinion respecting eoliths throws doubt on the theory of the evolution of mankind at its very start? If they cannot agree whether certain implements were man-made or nature-made, how can they be sure that man was even in existence as long ago as they suppose?

A little further on our author makes another concession.[23] We shall summarize it to save space. All through human history people of various degrees of cultural advancement have been living contemporaneously in different parts of the earth; here they are highly civilized, there they are almost naked savages. For example, the last of the native Tasmanians died only in 1877; yet these people were in as low a cultural state as were the eolithic, or at least the paleolithic, folk. And yet some of them were living in the last quarter of the nineteenth century, contemporaneous with the advanced civilization of Europe and America, and within the memory of many people now living.

Is not that a fatal count against evolution? If there were paleolithic, or even eolithic, people in existence in Europe centuries ago, they may have lived synchronously with the great civilizations of Babylonia, Egypt and Greece, simply dwelling far off in the hinterlands, just as there are wild, uncouth and savage people living to-day

[23] *Ibid.*, p. 3.

in remote regions. Yes, right here in America, before our very eyes, we have proof upon proof of the rapid deterioration of people who have been removed from the centers of civilization.

Now, since we have proof positive of such human deterioration, and since no instance of evolution by merely resident forces from lower to higher civilizations can be cited, is it not better reasoning to conclude that the eolithic, paleolithic and neolithic folk were remote and therefore degenerate tribes living within historic times? Missionaries inform us that almost all the native people of Africa and the South Sea islands furnish clear evidence that they are the decadent offspring of races that were once enlightened. The grammatical structure of their languages, the principles of which they themselves do not understand and of which they are not even aware, proves their descent from superior races, or at least points to that view as the only logical induction.[24]

Attention is here called to a valuable book, the *Journal of the Transactions of the Victoria Institute* for 1921. We shall quote from several scientific laymen who have made special researches in ethnology: "Fetichism bears traces of truths far above and beyond itself. How did these find their way in? The answer is difficult on the evolutionary hypothesis." [25] "Is fetichism a first step up or a last step down, an evolution or a degradation? The former is contrary to experience." [26] "Fetichism is a degradation from a purer faith, of which it contains traces, a far-off glimpse of a Supreme Creator." [27] "I cannot believe that polytheism develops into monotheism; still less that polydemonistic tribal beliefs reach

[24] See Alexander Le Roy, *The Religion of the Primitives,* and Maurice Frater, *Midst Volcanic Fires.*

[25] *Journal of the Transactions of the Victoria Institute,* 1921, p. 153.

[26] *Ibid.,* p. 164.

[27] *Ibid.,* p. 165.

monotheism by the same route. History testifies to the contrary." [28] "So far from civilization having been evolved from the savage state, the opposite is the case." "Monotheism preceded polytheism."

How illogical it is, therefore, to conclude that the lowest types of humanity living to-day are the representatives of the progenitors of the human race!

Our author may be correct in holding that Asia is the birthplace of mankind; but when he argues that the physical and climatic conditions there during the Tertiary era were such as to force man's "prehuman forebears" to descend from the trees and to learn to live on the ground, he is again reasoning in a circle and taking for granted the very thing to be proved. Was man once an arboreal creature? That is a mooted question to-day among evolutionists themselves, as we have previously shown.

Professor Lull begins his dissertation on the fossil remains of human beings, which, he holds, furnish to the paleontologist the "most convincing line of evidence for the antiquity of man." [29] Then he says, "these remains are rare," which statement he follows by showing that they must be rare from the very nature of the case. "One marvels," he adds, "not that the missing links in our chain of evidence are many, but rather that we possess any chain at all."

This frank concession must be analyzed. "The missing links in our chain of evidence are many," then, how can the scientists erect a vast scientific structure on the mere supposition that those missing links once existed? It is an evasion of the real question to say, the wonder is "that we possess any chain at all." If nature

[28] *Ibid.*, p. 167.
[29] *The Evolution of Man*, p. 7.

wrought all things through myriads on myriads of years by means of evolution, we would have a right to expect her to leave indubitable marks of her *modus operandi,* and furnish unmistakable evidences of the same process to-day. One cannot help wondering why at least a fair number of those myriads of intermediate forms have not been found. They surely ought to be in evidence —if they ever existed. To say that they once existed, but that we ought not to expect to find them now, is merely, once more, a begging of the question. The study of geology proves that there are missing links along the whole line of organic life; and they are always missing, too, at those strategic points where the evolution needs them most.

The contention that man is of brute lineage over against the doctrine that he was created in the divine image an intelligent, moral and spiritual being, is a matter of such grave import—involving the welfare of humankind both for time and eternity as it does—that it ought to rest on indubitable evidence, and ought not to be taught and propagated unless it is supported by such evidence. We cannot believe that acceptance of the theory of a brute origin for man will make men better and nobler; indeed, we fear it will have a tendency to debase them. For our part, our sense of responsibility as an instructor of youth is so keen that we long ago determined to teach no theory that bears vitally on the welfare of humankind, unless we are convinced of its truth by irrefragable proof.

The Inadequacy of the Data as Evidence

It is both interesting and surprising to note how many damaging admissions honest scientists are compelled to

make. For instance, Professor Lull says of "a scattered skeleton and one overlaid by absolutely undisturbed deposits" (which are regarded as "good criteria of contemporeity"), that "chance often makes strange bedfellows." Then he narrates a pertinent incident. He once found a glass bottle of recent manufacture "beneath the hip bone of an extinct horse in an apparently undisturbed Pleistocene deposit in Texas." Afterward he found that "the looseness of the surrounding sand betrayed a filled-in animal burrow into which the bottle had undoubtedly been thrust. Thus we see how small a circumstance may entirely reverse a situation.

Anatomical distinction, though valuable as evidence, also has its difficulties, says our author, because *modern* types of men have been found in connection with geological formations of *great antiquity* or with long-extinct animals. Note that statement. Scientists seem to be shifting from their former view of "a single line of phyletic descent to modern man. . . . The belief is gaining ground . . . that there were several lines of descent, all of which may be of ancient origin, so that what have been called modern types of mankind might be found contemporaneous with, or even antecedent to, the remains of more primitive races." [30]

Only a passing notice to what Professor Lull has to say about the various fossil human remains that have been unearthed can be given here. Although we have read the whole presentation carefully and conscientiously, we remain unconvinced; and for two reasons: 1. The uncertainty connected with many of these finds and the paucity of the remains make a sandy foundation.[31] 2. Another

[30] *Ibid.*, p. 9.

[31] To cite just one familiar example: the remains of the Trinil Man (*Pithecanthropus Erectus*) include only a skull-cap, three teeth, and a left femur, the last in an injured or diseased condition. Says the author:

explanation of the facts which is just as reasonable is that all inferior types of humankind are the result of sin and degeneration. This last view becomes all the more patent when we remember that we see enacted every day right before our eyes the tragedy of human degeneration; whereas we see no decisive evidence of inferior plants, animals and men evolving, by means of resident forces, into higher types. Every case of improvement comes about because some outside force of a higher character has been injected.

In his chapter on "The Natural History of Man," Professor Ferris makes a good deal of the recapitulation theory.[32] Like his colleagues, he can see nothing but resemblances to animals in the prenatal development of the human child. He evidently has overlooked what Colgrave and Short (two eminent British scholars) have to say on this point in their recently issued book, *The Historic Faith in the Light of To-day*.[33]

But we shall do more than merely quote authorities. The resemblances between the embryo of the child and the animals are only superficial; the germ-plasm of the child is a *human* one from the start, and never develops into anything but a *human* being. This proves that it is essentially and generically unique. There are also a number of missing links in the process of development,

"These probably pertain to a single individual, although they were found scattered through some twenty yards of space, and were not discovered at the same time." The fact is, the femur was found nearly a year after the cranium. From such meager and uncertain data learned men reconstruct a head that is half human and half simian, call it a missing link, and then label the process science! To our mind, such faith seems like credulity. At all events, it is naïve faith, not rational faith.

[32] *The Evolution of Man,* p. 62.

[33] The footnote references to scientific authorities cited by these writers are as follows: Kellogg, *Darwinism To-day,* pp. 18, 21; Professor Sedgewick, *Darwin and Modern Science* (Darwin Centenary Volume), p. 174; Article, "Embryology," *Encyclopedia Britannica.*

which, like other missing links, must be supplied by the imagination of the scientist. One scientist says that "the entire half of the history of evolution is not even hinted at in the epitome." Moreover, the embryos of worms and other articulates lie doubled *backward* around the yolk; while all embryos of the vertebrates are doubled the other way from the beginning. If evolution is true, why does not the human embryo begin its development as do the worms?

But even if the human embryo did repeat all the steps in the cosmical process from the amœba to man, it would not necessarily prove man's descent from lower forms of life. It would simply prove that man is in many respects like them, because he was made by the same Creator.

And What About Precipitin Blood Tests?

In regard to the "blood relationship" existing between man and the anthropoid apes,[34] because of the susceptibility of apes to human diseases and their reaction to various blood tests, we would again refer the reader to Colgrave and Short: "Great capital has recently been made of the fact that the precipitin test shows no difference between the blood of an ape and that of a man, which is held to prove that they are chemically identical. But newer tests (agglutinins) have since been made use of, and it is safe to say that no surgeon, in the light of our present-day knowledge, would be so foolhardy as to transfuse any large quantity of an ape's blood into a man." [35]

Anent this important question of blood-reaction tests, a few additional remarks are added here. A good many

[34] *The Evolution of Man*, p. 78.
[35] *The Historic Faith in the Light of To-day*, pp. 14, 15.

fine experiments have been made by various scientists, especially Friedenthal, Ulhenhuth and Nuttall, and some advocates of evolution are very certain and enthusiastic about the results. One recent champion, Dr. Michael F. Guyer, Professor of Zoölogy in the University of Wisconsin, refers to Professor Nuttall's investigations of "some twenty years ago" as having "demonstrated that by the precipitin test a scale of actual blood relationships among animals can be established." [36] This scientist evidently has not read some of the recent analyses of Nuttall's finds of "some twenty years ago."

To all interested parties, we desire to recommend Dr. Harold C. Morton's recent work, *The Bankruptcy of Evolution,* in the appendix to which he offers an acute critique on the subject of blood precipitin tests. He shows that Nuttall was very modest in his claims, saying that his experiments constituted only "a preliminary investigation which will have to be continued along special lines by many workers in the future." Thus Nuttall had no disposition to pronounce a dogmatic judgment on the results of his discoveries.

Dr. Morton's analysis of Nuttall's report is quite technical. He shows again and again that the testimony is dubious, and that to draw conclusions from it in favor of evolution is to be guilty of the logical fallacy of overbroad generalization. We can call attention to only a few salient facts. One set of tests included the following animals: Forty-nine reptiles, fourteen amphibians, nineteen fishes, seven crustaceans, one duckbill (a very low Australian mammal) and two lemurs (the last animals belonging to the ape tribe). "Yet," says Dr. Morton, "all these were alike in giving no reaction at all! The lemur should certainly have revealed its difference from

[36] See *The Scientific Monthly,* Aug., 1925.

the crab." Would the evolutionists claim that the reptiles, amphibians and crustaceans (crabs) are as near relatives to man as are the lemurs, which belong to the simian race?

Tests that were made with other animals gave some reaction, generally very slight. This would prove that all of those animals bear a closer kinship to man than does our little ape, the lemur, which gave no reaction whatever. The foregoing were qualitative tests. Professor Nuttall also made quantitative tests, the results of which were peculiar. For instance, in two tests the anthropoid orang-outang (man's supposititious nearest relative) gave a precipitate of forty-seven and eighty per cent. Why this large difference? The same tests gave a short-tailed Old World monkey (*macacus rhesus*) a reaction of seventy-two and ninety per cent. This would indicate that the said monkey is a closer relative to man than the anthropoid ape, which contradicts the current view among evolutionists. And, besides, as Dr. Morton says, "The quantitative and qualitative tests disagree."

In one of the tests the anthropoids (the chimpanzee and the gorilla) and the horse gave the same result, namely, twelve thousandths per cent; while "man, the civet cat and the little Madagascan mammal called the tenrec all gave eleven thousandths per cent." This odd result would prove the civet cat and the tenrec to be nearer relatives to man than are the anthropoids! Even Professor W. B. Scott, says Dr. Morton, has to make the following admission: "It could hardly be maintained that an ostrich and a parrot are more nearly allied than a wolf and a hyena; and yet that would be the inference from the blood-tests."

Another expert critic of the blood-test argument has given us the benefit of his technical scientific knowledge.

We refer to Arthur I. Brown, M.D.,[37] Vancouver, British Columbia. He is a physician, not a minister or a theologian. In an elaborate article this scholar subjects these blood-test reactions to a keen and critical analysis.[38] His technical training enables him to go into the chemistry of the precipitin tests. He shows that the blood must first be converted into serum before it can be used in these experiments. By this process most of the original chemical constituents are removed from the blood, while the *vital principle* or *force,* which is the very *crux* of the matter, is thereby destroyed. Subjecting Nuttall's six tables to close scrutiny, Dr. Brown says:

> Table C reveals the fact that Old World monkeys and New World monkeys are 42 points separated, while in Table D an impassable gulf of 64 degrees yawns between them. Table A permits marmosets and Old World monkeys to come as close together as 42 points, but Table D increases the distance to 64 points. In table E anti-sheep serum was used on horses and other animals. According to one test, horses and sheep are 84 degrees removed. In this same table where anti-pig serum was used against horses and sheep, the two latter animals are close brothers, only three points apart.

Again, our author shows that, in one of Nuttall's tables, man and the anthropoids are eight points removed, while in another table they are thirty-five degrees distant, a difference of twenty-seven degrees; and, passing strange, a third table marks them as practically identical. "Noth-

[37] Dr. Brown's academic titles are as follows: M.D., C.M., F.R.C.S.E., the last standing for Fellow of the Royal College of Surgeons of Edinburgh.

[38] In *The Bible Champion,* Nov., 1925.

ing can be proved by such divergences," says Dr. Brown. So the much-lauded blood precipitin tests are not sufficiently reliable to add anything to the argument for evolution.

Dr. Brown brings forward this telling fact:

> Compare ass's milk and human milk. By adopting evolutionary logic, we should come to some ridiculous conclusions. Quantitative chemical analysis reveals the fact that, of all mammals, the ass is closest to man in this respect—the similarity of their milk. We would hardly dare to assert that man must class himself with this long-eared fraternity, nor that, because the horse's milk is nearest in composition to that of the ass, we should adopt the following genetic order from above downward, viz., man, ass, horse, cow. For our part, we do not see why the milk test should not be as valid and determinative as the blood test.
>
> Between animals and men there are many resemblances [says Dr. Brown] but there are more contrasts, and the contrasts are the more striking. As similarity in bodily structure does not prove blood relationship, neither can dissimilarity necessarily be used as disproof of such relationship. It is his mental and spiritual qualities that separate man by an impassable gulf from all lower animals. This is the real test of heredity, and if two individuals have nothing in common in these realms, no one can reasonably affirm that they descend from a common ancestor.

Concluding Reflections

In concluding our thesis, it remains to be said, frankly, that our reading of many books and articles by the advocates of evolution, and our no less careful endeavor to weigh judicially the facts and arguments adduced by them, have convinced us more firmly than ever that the theory lacks scientific verification, and is based on mistaken inductions, while, at the same time, many outstanding natural and other data are positively arrayed against it. No one needs, therefore, to be in haste to cast overboard the teaching of the Sacred Scriptures relative to the origin of the universe, of life and species, and of the human family. Since the problem of origins is so happily solved in the Bible, it follows logically that the same marvelous Book furnishes the solution of the further problems—which also are paramount—of the purpose of man's creation and the ultimate destiny predetermined and prepared for him by his gracious Maker, Preserver and Redeemer. At the same time, if our interpretations and inductions are correct, full-toned evangelical Christianity and the verified results of science may and do dwell together in the most amicable accord.

BIBLIOGRAPHY

In the preceding pages many works both for and against special creation, and likewise for and against evolution, have been cited. The author does not believe that the works of pro-evolutionists can justly be said to have been slighted. A brief list of recent works on the side of special creations [1] and opposed to evolution is here appended. The list might be greatly enlarged, but it is thought best to name only those works that are of a specifically scientific character, written by authors who are professional scientists, or by theologians who have gone deeply into the scientific phases of the questions at issue.

COLGRAVE, B., and SHORT, A. R., *The Historic Faith in the Light of To-Day.*

LE ROY, A., *The Religion of the Primitives.*

FAIRHURST, A., *Organic Evolution Considered; Theistic Evolution; Atheism in our Universities.*

PRICE, G. M., *The Fundamentals of Geology; The New Geology: A Text-Book for Colleges and Training Schools; The Phantom of Organic Evolution.*

MORTON, H. C., *The Bankruptcy of Evolution.*

ZERBE, A. S., *Christianity and False Evolutionism.*

MORE, L. T., *The Dogma of Evolution.*

O'TOOLE, G. B., *The Case Against Evolution.*

This is perhaps the most technically scientific work against evolution that has thus far appeared in the English language.

SPENGLER, O., *The Decline of Western Civilization.* This work has just been translated into English.

FLEISCHMANN, A. (in collaboration with Gruetzmacher), *The Idea of Evolution in Connection with Present-day Physical and Social Science.*

[1] One of these works, that of L. T. More, can hardly be said to uphold the doctrine of special creations in a positive way.

ADDENDUM

The reader will, we believe, appreciate our calling his attention to the following list of capable works which uphold, in a positive way, the biblical world-view, and set forth its profound rationality. In many places they discuss the problem of creation and evolution. Some of them, published a number of years ago, have come to be regarded as standard works, not to say classics, in their line, while others, no less persuasive, are quite recent.

ORR, J., *The Christian View of God and the World; God's Image in Man; The Problem of the Old Testament.*

WRIGHT, G. F., *Scientific Confirmations of Old Testament History; The Origin and Antiquity of Man.*

FAIRBAIRN, A. M., *The Philosophy of the Christian Religion.*

BAVINCK, H., *The Philosophy of Revelation.*

EBRARD, J. H. A., *Christian Apologetics: The Scientific Vindication of Christianity.*

JOHNSON, W. H., *The Christian Faith Under Modern Searchlights.*

MULLINS, E. Y., *Why is Christianity True?; Christianity at the Cross Roads.*

ORMOND, A. T., *The Philosophy of Religion.*

THOMAS, M. B., *The Biblical Idea of God.*

TAYLOR, C. C., *The Purpose of God (As seen in the Old Testament).*

FINN, A. H., *The Creation, Fall and Deluge.*

REED, L. A., *Astronomy and the Bible.*

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